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 3B
COMMENTS AND RESPONSES

Prepared by: **U.S. Army Corps of Engineers, Baltimore District**
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September 2005

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In Cooperation with:

NCPC

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.

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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 de-watering 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:

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United States Environmental Protection Agency	120, 182
United States Department of the Interior	122
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City and County Agencies, and Elected Officials:

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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.	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. The residuals project will be paid for by the wholesale customers. See topic AD for a discussion of Washington Aqueduct project funding.	EIS Volume 1 - Section 2.3 Alternatives screening Process and Criteria EIS Volume 1 - Section 4.14 Cost
AB	Cost, supporting data	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. 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).	EIS Volume 4 - Engineering Feasibility Study Compendium EIS Volume 4 –Engineering Feasibility Study Compendium Sections 3.1.2 and Section 5.7.

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		This change significantly increased the cost of the Alternative 5 pipeline. 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.	EIS Volume 4 – Engineering Feasibility Study Compendium, Table 5-2
AC	Opportunity cost of land	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.	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.
AD	Washington Aqueduct Funding	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. 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. 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	

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		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. 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. 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.	

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Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
BA	Facility appearance	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. 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. 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. Berms and other architectural landscape devices are possible measures to mitigate or minimize visual impacts. These features will be incorporated into the selected alternative. 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. The project will be submitted to the National Capital Planning Commission (NCPC) 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. 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 NCPC regulations. The architecture and siting of the building will take the natural and built surroundings into consideration.	EIS Volume 1 - Section 4.12 Visual Aesthetics EIS Volume 1 - Figures 4-2 to 4-11 EIS Volume 4 – Engineering Feasibility Study Compendium, Section 4.4

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Topic / Sub-topic	Summary	Response	See EIS section
BB	Facility location	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. 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.	EIS Volume 1 - 4.16 Land Application of Water Treatment Residuals
		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.	EIS Volume 4 - Engineering Feasibility Study Compendium Section 3 Screening of Alternatives
		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.	
		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).	EIS Volume 4 – Engineering Feasibility Study Compendium, Figure 4-22. EIS Volume 1, Section 6

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Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		Reference Section 6, Volume 1 of the EIS for a discussion of the reasons for recommending the East Dalecarlia Processing site. 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.	
BC	Facility noise	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. The proposed residuals processing facility will not generate noise or vibrations that could travel through the ground or the groundwater. The various environmental impacts of the proposed residuals processing facility are summarized in the EIS.	EIS Volume 1, Section 4.3.3.2 Alternative B – Dewatering at Northwest Dalecarlia Processing Site and Disposal by Trucking EIS Volume 1, Section 4.3.3.5 Alternative E – Dewatering at East Dalecarlia Processing Site and Disposal by Trucking EIS Volume1, Section 4.
BD	Facility simulation	Visual simulations have been prepared for individual residuals facilities in lieu of an area-wide digital model.	EIS Volume 1 – Section 4
BE	Facility access	See transcript discussions labeled "BE" for responses.	EIS Volume 4 – Engineering Feasibility Study Compendium
BF	Facility light	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. 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.	EIS Volume 4 – Engineering Feasibility Study Compendium EIS Volume 1- Section 4.12 Visual Aesthetics

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Topic / Sub-topic	Summary	Response	See EIS section
		Also, see transcript discussions labeled “BF” for responses.	
BG	Facility smell	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. 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. 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.	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.	EIS Volume 1- Sections 4.5 Aquatic Resources and Section 4.6 Biological Resources (Terrestrial) EIS Volume 2-Appendix 2B: Biological Resources
BI	Facility impact on Sibley Hospital	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. 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	

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Topic / Sub-topic	Summary	Response	See EIS section
		offered suggestions related to the proposed residuals processing site.	
BJ	Facility, Dirt/Dust	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 *de minimus* threshold levels for particulate matter (PM 10). 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. The nature of alum residuals is that they retain moisture and therefore are not expected to dry out on the haul route. The means of processing residuals would be through thickeners and centrifuges. These types of equipment operate in a wet/moist environment. 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. 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.	EIS Volume 1- Section 4.3 Air Quality EIS Volume 2A- Air Quality EIS Volume 4
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	

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Topic / Sub-topic	Summary	Response	See EIS section
		neighborhood property values because the construction and operation of the proposed residuals facilities will have no significant environmental impact on the neighborhood. 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.	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	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. The Corps of Engineers plans to investigate the monofill site for the potential presence of buried munitions in 2008. 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	EIS Volume 1 - Section 6.2.1 Detailed Reasons for Not Selecting Alternative A: Dewatering and Disposal by Monofill EIS Volume 4 – Engineering Feasibility Study Compendium - Section 3.1.2

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Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		alternative. Environmental impacts associated with the Alternative A (monofill) are described in the EIS. 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. 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. The monofill would be located on the east side of the Dalecarlia Reservoir in an area designated the Dalecarlia Woods. 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. The costs for the monofill alternative are included in the Volume 4 of the EIS.	EIS Volume 1, Section 4 EIS Administrative Record EIS Volume 1, Figure 2-1 EIS Volume 1, Section 4.9.3 EIS Volume 4- Engineering Feasibility Study Compendium, Section 5-7.
CB	Monofill Chemical Exposure	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.	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.1.2 Alternative 2
CC	Monofill height	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.	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.

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Topic / Sub-topic	Summary	Response	See EIS section
CD	Monofill Trees	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.	EIS Volume 1, Section 4.
DA	Pipeline preference to Blue Plains	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. 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). 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. **Potomac Interceptor Shut-off Valve:** As discussed in Section 3.1.2of 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	EIS Volume 1 - Section 6.2.2 Detailed Reasons for Not Selecting Alternative C: Thickening and Piping to Blue Plains AWWTP EIS Volume 4 – Engineering Feasibility Study Compendium Section 3.2.1. EIS Volume 1 – Table 4-6. EIS Volume 1 – Section 3.1.2. EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.1.2

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Topic / Sub-topic	Summary	Response	See EIS section
		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. 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. 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. 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. 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	

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Topic / Sub-topic	Summary	Response	See EIS section
		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.	
DB	Pipe in a pipe	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. 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. 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	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	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. 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,	EIS Volume 4 - Engineering Feasibility Study Compendium, Section 3.

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Topic / Sub-topic	Summary	Response	See EIS section
		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. 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.	
DF	Fairfax Water - Corbalis WTP	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.	EIS Volume 2A – Appendices EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3
DG	Potomac River	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	EIS Volume 4 - Engineering Feasibility Study Compendium, Section 3.

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Topic / Sub-topic	Summary	Response	See EIS section
		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.	
DH	George Washington Parkway	This alternate pipeline route was evaluated in Volume 4 of the EIS. 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.	EIS Volume 4 – Engineering Feasibility Study Compendium, Table 3-7.
DI	Pipeline Size	The two 12-inch pipelines proposed for the Blue Plains alternative provide 100-percent redundancy for the design flow rate.	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.1.2 Alternative 5 discussion
DJ	Regionalization	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. 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	EIS Volume 4 – Engineering Feasibility Study Compendium

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Topic / Sub-topic	Summary	Response	See EIS section
		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. 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. 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.	
DK	Rockville WTP	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	EIS Volume 2A – Appendices

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Topic / Sub-topic	Summary	Response	See EIS section
		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.	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3
DL	Processing site near Beltway	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. 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. 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	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)

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		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. 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	

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		round trip residuals haul distance of approximately 140 miles (versus the 150 miles assumed or the Dalecarlia WTP alternative. 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.	
DM	COE hasn't adequately investigated other piping alternatives	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. 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.	EIS Volume 4 - Engineering Feasibility Study Compendium
EA	Residuals disposal method	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. 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. One potential residuals disposal method under consideration by Washington Aqueduct is to allow a cement plant to use the residuals in	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
		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. 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. 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. 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. 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.	EIS Volume 4 – Engineering Feasibility Study Compendium section 3.2 Alternative P84 discussion. EIS Volume 1 – Section 4.16

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
EB	Residuals processing method and impacts	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.	EIS Volume 4 - Engineering Feasibility Study Compendium Section 3.1 – May 2004 Alternatives Screening
		Alternate temporary residuals storage locations, such as the Dalecarlia Reservoir, are evaluated in the Engineering Feasibility Study Compendium.	EIS Volume 4 – Engineering Feasibility Study Compendium Section 3.2.2 – Public Alternative P82 discussion
		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.	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.
		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.	
		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.	EIS Volume 1, Chapter 4

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
EC	Residuals Quantities	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. The impacts associated with each residuals processing alternative are discussed in Section 4 of the EIS.	EIS Volume 4 – Engineering Feasibility Study Compendium, Appendices and Sections 2 and 3. EIS Volume 1, Section 4.
FA	Construction Schedule	See transcripts for responses. 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.	EIS, Volume 1, Section 2.3 EIS Volume 1, Executive Summary
FB	EIS Schedule	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. 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. 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	EIS Volume 1, the Executive Summary lists the objectives defining the project's purpose and need and provides a project schedule. EIS Volume 1, Section 2.3 describes the screening criteria, including the one to meet the FFCA schedule. EIS Volume 2, A copy of the FFCA schedule is included under the Regulatory Information tab. EIS Volume 4, Engineering Feasibility Studies Compendium provides a complete description of the screening evaluation and results.

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		measures.	
FC	Compliance performance	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.	EIS Volume 2 – Appendices, Regulatory Information Section
FD	Short-term or Temporary 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. 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. 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	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	Four public comment periods were provided prior to the issuance of the FEIS: 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
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Topic / Sub-topic	Summary	Response	See EIS section
GA	Trucking, neighborhood impact	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. 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) 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. 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. 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	EIS Volume 1 - Sections 3 and 4, throughout EIS Volume 4 – Engineering Feasibility Study Compendium, Table 3-6. EIS Volume 1 – Section 7 Cumulative Impacts and Mitigation

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		truck loads predicted over an annual period is 8 per day. **Impact of residuals equalization on truckloads per day:** 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. 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 is 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 is does not increase the overall height of the thickener structures. **Start-up year versus design year truck trips per day:** 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	EIS Volume 4 – Engineering Feasibility Study Compendium – Appendices EIS Volume 1 – Section 7 Cumulative Impacts and Mitigation

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		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. 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. 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. **Listing schools along truck routes:** 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. **Truck accidents along proposed truck hauling routes:** The number of truck accidents on proposed truck hauling routes is not	EIS Volume 4 – Engineering Feasibility Study Compendium – Appendices] EIS Volume 1 – Section 3.10

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		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. 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. **Trucking mitigation measures requested by the public:** Repave Dalecarlia Parkway with sound deadening asphalt: Washington Aqueduct does not know the basis of the pavement deign 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. Reimbursement for truck related damage to Montgomery County roads: The public roads exist for personal and commercial use. State and local jurisdictions are responsible or maintenance of roads. Each jurisdiction funds road maintenance and repair within its budget often through permitting, taxes, etc. Speed limit and warning signs: 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. Additional speed monitoring and enforcement by the police: Washington	

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		Aqueduct will cooperate with any speed-monitoring program initiated by police agencies. Any driver found to violate speed limits will be disciplined. Neighborhood reporting system for excess truck noise, speeding trucks, etc.. 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. Sound barriers along truck routes: 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. Improved signaling at Dalecarlia Parkway/Little Falls Road intersection: 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. 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. **Residuals falling from the trucks:** Residuals hauling trucks will be equipped with fabric covers to prevent residuals from blowing or falling off trucks and gasketed tailgates (to prevent dripping). **Truck vibration impacts on neighborhood homes:** 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	EIS Volume 1, Section 7.2 EIS Volume 1 – Section 4.11

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		trucks proposed for this project. **Truck impact on neighborhood ambience:** 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. **Trucking impact on traffic congestion in an already congested area:** 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. **Incomplete response to Montgomery County Planning Board letter:** 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.	
GB	Trucking alternative	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. 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. 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	EIS Volume 4 – Engineering Feasibility Study Compendium Section 3 – Screening of Alternatives EIS Volume 1 – Section 4.16

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		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. **Alum Recovery:** Reference a memo discussing alum recovery included in the Appendices of the Engineering Feasibility Study Compendium.	EIS Volume 4 – Engineering Feasibility Study Compendium - Appendices
GC	Trucking, noise	**Noise impacts from facility and trucks:** 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 sounds walls along area interstates by directing noise away from neighbors. With this mitigation, noise impacts are determined to be not significant. **Truck noise mitigation measures:** 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.	EIS Volume 1 – Section 4.3 Noise EIS Volume 1 – Section 7.2
GD	Trucking routes	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	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 3.2.3- Description of Public Alternatives Consistent with Screening

TABLE 1
Comments and Responses by Topic

Topic / Sub-topic	Summary	Response	See EIS section
		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.	Criteria
		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.	EIS Volume 4 – Engineering Feasibility Study Compendium, Table 3-7 Alternative P79
		Using smaller trucks to dispose of dewatered residuals offsite would not increase the number of available of 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.	
		Trucking route maps are included in the EIS.	EIS Volume 1, Section 3.
		MacArthur Boulevard appropriate as a truck route?	
		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.	
		Do trucks traveling to Westmoreland Circle immediately access Dalecarlia Parkway?	EIS Volume 1 – Figure 3-8
		Yes, truck access routes near the Dalecarlia plant are shown in Figure 4-1.	
		Single truck route proposed in DEIS:	
		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	EIS Volume 1 – Section 7.2

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		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. **Quantify Impact of Trucks on Neighborhood Roads:** 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. The public roads exist for personal and commercial use. State and local jurisdictions are responsible or maintenance of roads. Each jurisdiction plans for and funds road maintenance and repair within its budget often through permitting, taxes, etc. **Limit trucks through Montgomery County to those delivering to Maryland disposal sites:** 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. **Truck dispersal plan needed:** 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	

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Topic / Sub-topic	Summary	Response	See EIS section
		trucks on one route would not decrease the level of service of that route. See topic GA for a discussion of schools along trucking routes.	
GE	Trucking frequency	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. **Adverse impacts of 132 trucks per day through a residential area:** 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: - 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 In addition, it does not represent the number of trucks, but rather, one way truck trips. **Trucking Schedule:** See discussion under topic GK.	EIS Volume 4 – Engineering Feasibility Study Compendium, Tables 2-1 and 3-6 EIS Volume 1 – Section 7.2 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.
GF	Trucking Air Pollution	The emissions associated with trucking residuals to a remote disposal location result in an emission increase that is less than *de minimis* levels	EIS Volume 1 - Section 4.4.3.2

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Topic / Sub-topic	Summary	Response	See EIS section
		and, therefore, present no short or long term impact on air quality. **Will trucks use alternate fuels?** 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. **Will newer trucks be used to reduce emissions?** 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. **Will trucks be retrofitted to reduce air quality impacts?** 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. **Monitor fuel used by trucks:** 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. **How can 132 trucks per day not have an impact on the environment?** 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.	EIS Volume 1 – Section 7.2.1 EIS Volume 1 – Section 7.2.1

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Topic / Sub-topic	Summary	Response	See EIS section
		You did not adequately consider the air impacts of the preferred alternative: 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.	EIS Volume 1 – Sections 3.3 and 4.4
		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 *de minimis* 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.	EIS Volume 1 – Section 4.4
		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: <u>National Ambient Air Quality Standards</u> 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. The Washington, DC area is in attainment for lead, CO, nitrogen dioxide particulate matter (PM10) and sulfur dioxide and in non-attainment for	

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		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. 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. 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. 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. <u>General Conformity</u> 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 *de minimis* 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 *de minimus* threshold	

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Topic / Sub-topic	Summary	Response	See EIS section
		limits have not yet been established for PM2.5 non-attainment areas, EPA guides the action to compare calculated emissions to the PM10 *de minimus* threshold level established in 40 CFR 93.153. 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). <u>Emissions Inventory for Washington Aqueduct</u> 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. The *de minimis* 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 *de minimis* 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 *de minimus* threshold for PM2.5 has not yet been established. Until such action occurs, EPA recommends application of the PM10 *de minimus* threshold to PM2.5 total air emission calculations. State Implementation Plans (SIPs) prepared by the State of Maryland, the Commonwealth of Virginia, and the District of Columbia include control	

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		strategies to reduce volatile organic compounds and nitrogen oxides that contribute to the formation of ozone. <u>Air Quality Significance Criteria</u> The project is presumed to conform to the regional implementation plans if the potential increase in emissions is less than the *de minimis* thresholds. By using these criteria, the following levels of impacts were identified: *No Impact* If implementation of the action causes an increase in air emissions that is less than the *de minimis* threshold levels, the alternative is considered to have no impact. *No Significant Impact* If implementation of the action causes an increase in air emissions that is greater than the *de minimis* threshold levels but has been accommodated with the existing regional implementation plan, the action has no significant impact. *Significant Impact* A significant impact occurs if the potential increase in emissions is above the *de minimis* 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. Impact Evaluation by Alternative and Option The Washington Aqueduct must determine if their proposed actions exceed *de minimis* 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	

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		SIP. 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. 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. 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 *de minimis* threshold levels and therefore present no short term, long-term, direct, or indirect adverse impacts to the affected resources. 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. Supplemental analysis has been provided since the completion of the	

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Topic / Sub-topic	Summary	Response	See EIS section
		draft EIS to address the recent establishment of the Metro WA area as non-attainment for PM2.5. Currently there is no established threshold *de minimus* level for PM2.5 in the SIP. EPA has recommended that the *de minimus* 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 *de minimus* threshold levels for all (attainment and non-attainment) areas and there is, therefore, no impact and the action is inconsequential. The results from the new analysis, MOBILE6.2 is provided in Section 4 along with the existing AP42 analysis. 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. Also see topic BJ for a discussion of dust and dirt control during the construction phase of the project.	
GG	Trucking Safety	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. 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. 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	EIS Volume 1 - Section 4.11 – Transportation EIS Volume 1 – Table 4-11

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Topic / Sub-topic	Summary	Response	See EIS section
		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. 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. **Safety implications of 132 trucks per day through MD/DC residential neighborhoods:** 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. 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. **Additional traffic accidents anticipated with more trucks on the road:** 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	

TABLE 1
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Topic / Sub-topic	Summary	Response	See EIS section
		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.	
GH	Trucking Vibration	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.	EIS Volume 1 - Section 4.11 - Transportation
GI	Trucking Costs	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. **Seriously mischaracterized the true cost of trucking:** 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. 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. 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	EIS Volume 1- Section 4 throughout EIS Volume 1 – Tables 4-7 and 4-8

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Topic / Sub-topic	Summary	Response	See EIS section
		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. **Include the cost of trucking forever (versus 20 years):** 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. **Use Combined Trucking and Operating Costs to Screen Alternatives:** 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.	
GJ	Existing Dalecarlia Parkway vehicle/truck volumes	**What are the current vehicle/truck volumes on Dalecarlia Parkway?** 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:	EIS Volume - 2B - Appendices, Transportation Section

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<table>
<tr><th>Topic / Sub-topic</th><th>Summary</th><th>Response</th><th>See EIS section</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Date</th><th>Total Vehicles per day</th><th>Trucks per day (3 or more axles)</th></tr>
<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>
</table>
</td><td></td></tr>
<tr><td>GK</td><td>Trucking Hours</td><td>
DEIS has conflicting information on trucking hours,

MNCPPC letter recommends trucking between 9:30 AM and 4:00PM

The EIS has been revised to reflect consistent information regarding trucking hours.

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.

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.

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

Also see response to topics GA and GD.
</td><td>EIS Volume 1 – Sections 4.11 and 7.2</td></tr>
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HA	Barge, preference	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. 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. 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.	EIS Volume 1 -TABLE 3-9: May 2004 Alternatives Screening Results Summary 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
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	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: <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 <u>From Georgetown</u> 7/20/04; 8/10/04; 8/19/04; 12/2/04; 2/2/05; 7/12/2005 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.	
KA	Impure water quality, raw water intake	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.	EIS Volume 4 – Engineering Feasibility Study Compendium, Section 4.5 and Table 3-7
KB	Monitoring water quality and safety	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.	EIS Volume 1 - Section 4-17: Public Health
KC	Residuals quality	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.	EIS Volume 1 - Section 4-17: Public Health

KD	Health Impacts of Diesel Truck Traffic	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 *de minimis* threshold for the criteria pollutants. These actions are termed "inconsequential" by the CAA regulations. The *de minimus* 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 *de minimus* 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. 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.	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 MIEX, 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	Changes were made as requested by US Department of Interior (Document 122). Response to Montgomery County Council letter (Document contained in	EIS Volume 1 - Section 3.4.1 Dwarf Wedge Mussel EIS Volume 1 - Section 3.5.1 Terrestrial

		Appendix Volume 2A.. 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. 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. 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: • 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. 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. 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.	Special Status EIS Volume 1 – Section 3.10 Transportation EIS Volume 1 - Section 4.5.3 Impact Evaluation by Alternative and Option EIS Volume 1 - Section 4.6.3.1 Hay's Spring amphipod EIS Volume 1- Section 4.6.3.2 Alternative B EIS Volume 1- Section 4.6.3.3 Impact to Special Status Species EIS Volume 1- 4.6.3.4 Special Status Species EIS Volume 1- Section 4.11 Transportation

NA	NEPA Process Understanding	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.	EIS Volume 1 - Section 5.0 Public Involvement
NB	Screening criteria and Scoping Meeting	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. 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. 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. The screening criteria include cost because the proposed action must be economically feasible to the wholesale customers.	EIS Volume 1 - Section 5.0 Public Involvement and EIS Volume 4 - Engineering Feasibility Study Compendium, Section 2.2 Development of Alternatives EIS Volume 4 - Engineering Feasibility Study (original and updated Engineering Feasibility Study Compendium – Volume 4 of the EIS)
NC	Communication	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. 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	EIS Section 5.0 - Public Involvement.

		address this issue.	
ND	NEPA Process	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. See topic FC for a discussion of the FFCA schedule and its role in the screening process. 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. 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. Washington Aqueduct had no preconceived notion of what alternative it preferred when it started the NEPA evaluation of residuals alternatives in late 2003. 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	

		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	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. 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. 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. 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	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

		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. 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.	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	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. 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. See topics GA, GD, GF and GI for additional information regarding trucking.	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.

Document #30

1 DEPARTMENT OF THE ARMY

2 CORPS OF ENGINEERS

3 ----------X

4 IN RE: Washington Aqueduct Residuals Project :

5 ----------X

6 Tuesday, November 16, 2004

7 Washington, D.C.

8 Public Comment and Question/Answer Session and Technical

9 Presentation on Alternatives Identification and Screening

10 Process public meeting was held at Sibley Memorial

11 Hospital, Ernst Auditorium, 5255 Loughboro Road, N.W.,

12 Washington, D.C. 20016 from 6:40 p.m. to 10:23 p.m.

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P R O C E E D I N G S

MR. JACOBUS: I'm Tom Jacobus. I am the General Manager of the Washington Aqueduct. For those of you who have been to any previous meetings, good to see you all again. For those of you who are here for the first time, welcome. We look forward to the program this evening, to update you on our progress and receive further comment from you all.

I have two quick administrative things to do before we begin. One is I know most of you are aware of this, but I want to recognize the passing since we last met of John Finney. John -- I have known John for the ten years I've been there and he has been a very -- was a very valuable resource in stressing to me the views of the Palisades community and Advisory Neighborhood Commission. I certainly will miss his counsel and his input in the Washington Aqueduct and Dalecarlia Treatment Plant.

So it was a pleasure to know John. I know many of you met him through his work on projects the Aqueduct has undertaken. So I just want to recognize the contribution and what I have learned from John.

The other announcement I would like to

make is that I want to recognize the political officials that we have with us tonight or their representatives.

First of all, Council Member Denis from Montgomery County is in the room in the back. Ms. Steiner, representing Nancy Floreen of the Council, the Montgomery Council, from the Transportation Committee is here this evening. There she is in the back.

And we have Joan Klineman representing Congressman Van Hollen from Maryland.

I did not see any other -- are there any other --

I'm sorry. Alma Yates from the Advisory Neighborhood Commission.

Thank you all. Any other elected officials?

MS LEE: My name is Delegate Susan Lee. I represent District 16 in the Maryland General Assembly.

MR. JACOBUS: Thank you very much. Susan Lee. Thank you very much for coming.

Tonight -- if you didn't get a copy of the agenda, I think we've been passing them out. We would like to give you a few minutes of update and then, as we did last time, have the bulk of the discussion to receive

your input and throughout the evening share with you where we are and learn more from you. We very much appreciate you being here.

And, with that, I'll be turning this over the Jed Campbell. Thank you.

MR. CAMPBELL: Thanks, Tom.

Good evening, everybody. Again, my name is Jed Campbell. I recognize a lot of faces from our last meeting. My role here tonight is similar to our last meeting, which is really our facilitator for tonight. In that capacity, my job is to make sure that we have the best communication that we possibly can.

We really view this meeting tonight as a continuation of our meeting on September 28th. We will be using the same format. And, in that format, we'll take the first very short part of the meeting to update you on things that we have learned since our last meeting.

And, if you look to your agenda, the first segment of that says discussion of emerging issues with three project alternatives. Those are the three alternatives that we have been talking about during the duration of this project that are the ones currently

being evaluated in the draft Environmental Impact Statement.

At our last meeting we focused a lot of attention on the monofill. In this particular meeting we'll be sharing more information on the pipeline alternative to Blue Plains and also talking a little bit about the concerns that we have been hearing and some of the dialogue that we've had with a few of the neighbors with respect to the residuals processing facility currently proposed for land on the Dalecarlia Treatment Plant property line.

We will be sharing information on technical -- technical evaluations, some policy decisions that we've been made aware of, and then also, obviously, concerns we have been hearing from you.

The second portion of our brief presentation will focus on, if you look to your agenda there, we call it description of additional alternatives and options proposed by the public as of yesterday.

We have, I believe, about 100 of those. And we're not in a position to evaluate those in any way. A lot of thought clearly has gone into them. A lot of thought on the part of the Aqueduct team has to go into

looking at those. But we will take some time to talk about sort of where they came from, list them, and provide some thoughts on how to go forward.

All of this we hope to do within 20 to 30 minutes because we really want to stop and then turn the rest of the evening over to you and move forward in a question and answer format, frankly, just like last time. And, when we begin that format, I'll give a few ground rules, again, just to make sure that we are fair to everybody who wants a chance to communicate.

In the order of fairness, I would just ask that the people who present here at the beginning be allowed to present without interruption, because clearly you can ask any number of questions as long as we want this evening.

So I think with that we'll move forward. Jen, if you could bring up the first slide on the first presentation.

Again, our objective is to focus on kind of the update, what did we learn since our last meeting, particularly about the three alternatives. We'll review a little bit from the last meeting and then we'll focus on some policy issues that we've learned, some technical

issues, and then some dialogue that we've had with the community.

I'll turn it over to Glenn Palen.

MR. PALEN: Thank you, Jed.

These are the items we would like to go through in this part of the presentation. First, a review of the emerging issues for Alternative A, the monofill alternative. Second -- we're switching the order here. It will become obvious why as we talk though it. We'll talk about Alternative C, the Blue Plains pipeline alternative, some likely significant impacts associated with that alternative, as well as recent developments.

And the third, review of emerging issues associated with Alternative B, dewatering at Dalecarlia and trucking residuals from that site, including some public concerns and a discussion of those.

So, first, let's sort of recap Alternative A emerging issues, which is the monofill alternative. Not a lot of change here from what we told you last time, but still I'll go over the current status.

The likely significant impacts related to the monofill include the following: Visual, land use,

hazardous substances; as well as the general category of implementation uncertainty, which is a measure of, among other things, can we meet the schedule.

As we have discussed before, the Spring Valley schedule combined with the FFCA deadlines really are effectively precluding Alternative A from being selected.

The next alternative we're going to talk about is the Blue Plains alternative, or Alternative C. This pipeline -- or this alternative would mean building a pipeline 12 miles long from the Dalecarlia Water Treatment Plant to the Blue Plains Advanced Wastewater Treatment Facility.

Although this alternative eliminates trucking residuals from the Dalecarlia site, it would still require residuals to be trucked from the Blue Plains facility. Again, much of this is a review.

Work to date is revealing that there will be significant impacts associated with the pipeline corridor and with this alternative. Those include the following: Historic and archeological resources; hazardous materials in a variety of different locations along the right; sensitive land uses, obviously this

route goes by many historical and sensitive sites in the Capital area; economic impacts, which are really associated with the high constructions costs of this alternative.

We're currently in the process of finalizing or revising that cost estimate. Our best estimate right now is that it might be around $175 million, which is a significant change from the previous estimate we had quoted in the feasibility study.

Also other issues would include securing right-of-way permits, as well as the large number of local and federal agencies involved with such an alternative, which frankly complicates or extends the approval process.

All of these really translate into a general concern which we could characterize as implementation uncertainty.

Some very recent developments associated with this alternative include -- surround D.C. WASA, which has now formally indicated to Washington Aqueduct that they do not feel comfortable allocating space at the Blue Plains Wastewater Treatment Plant for Washington Aqueduct residuals processing facilities.

That is basically for two reasons, but they are related. There is additional wastewater treatment facilities anticipated to be needed to provide nutrient removal to meet Chesapeake Bay water quality goals. And this mostly surrounds the need, or the likely need, to reduce nitrogen levels in the discharge. Everybody is probably familiar with the flush tax that is being instituted in Maryland. That is all related to a desire or an initiative to reduce nutrients going to the Chesapeake Bay.

Blue Plains is affected by that initiative, as well.

The second item would be the need to provide additional wastewater treatment facilities and site space for treating combined sewer overflow -- flows. This is a new item. I think if you've been in the news -- or read the news you probably understand that there is an upcoming large CSO project planned and the treatment for that flow is planned for this site.

I'll let Jed talk about our traffic study.

MR. CAMPBELL: All right. That was a brief introduction on what we've learned so far about Blue Plains.

I'm going to switch gears now. I'm going to go to what we call Alternative B, which is collecting the residuals, dewatering them at Dalecarlia processing -- at the Dalecarlia processing facility, loading them on trucks and transporting the dewatered residuals to off-site disposal locations. We call that the trucking alternative.

Here is a little bit of the information that I shared with you last time and I will elaborate on this.

First of all, the last time we felt that based on the traffic impact study that we have been doing that truck traffic will not significantly impact existing road capacity. And that's used as a measure of a level of service, which is a technical term for how many trucks or cars can you put on a road before you have problems associated with that.

And then the issue of, well, what happens to the residuals when they get to their final destination. That could be any number of different places depending on where the contract haulers have contracts. All of those places will be licensed disposal places which ensures that environmental regulations are

being met. Let's go on.

A variety of concerns have been voiced to us and are continuing to be voiced to us about this alternative and the specific components of them. And Glenn and I will kind of together walk through what we know about those concerns so far.

We have heard concerns, obviously, about truck traffic, odor associated with residuals, about noise, not only related to trucks, but also to the residuals processing facility, about light pollution. That's primarily a concern with respect to the processing facility. Hours of facility operation and hours of the trucking, as well as visual impacts from a big building, in other words what will people be able to see, what will it look like, will that be destructive were the concerns associated with that.

I will talk a little bit about the traffic impact analysis in a very general way. This is all detailed in tremendous detail in the draft EIS. We talked last time about our truck numbers, how many trucks are expected to come from this facility. And we have provided a number of an average of nine truck loads per day; nine going in, that's nine going out.

The picture you see there with the red truck is a 20-ton truck and down there on the table to the right, the estimates is that 20-ton trucks under the current production of residuals at the Washington Aqueduct would be nine trucks.

Within a 20-year projection period due to increased population and the need to produce more drinking water, there would be more residuals, but then that would go up to 10 trucks.

If we reduce the size of the trucks, as we see in the table there, from 20 to 10 tons, we would generate 16 trucks per day.

You will see a bullet there that says plant will be designed to cover extreme conditions which would result in additional loads. Those additional loads, that's an average. Essentially, if the river has tremendous amounts of sediment due to primary to storms, it would generate more residuals and there would be more trucks.

We have looked at -- this is hopefully a familiar map to folks. We have looked at seven potential haul routes to help understand our impacts. This picture is -- this stuff is on the web page, too.

Why did we look at seven instead of just one or two? Well, one, we wanted to understand the haul routes under a wide range of potential conditions and we also wanted to provide operational flexibility to the Aqueduct, as well as an ability to disburse the vehicles across a wider geography.

So here is a little bit about what we learned. Go on to the next slide.

The haul routes that we looked at were evaluated for roadway capacity, operational efficiency, as well as safety. And here are the things that we looked at. We performed a mechanical and continuous traffic counts at different places that enabled us to understand the breakdown between passenger vehicles, buses, light trucks, and heavy trucks in terms of the existing conditions.

How do we compare the proposed trucks against existing conditions? We identified regional traffic growth trends, is traffic increasing or decreasing. We used average daily traffic data from D.C., Maryland, and Virginia. We also evaluated planned and proposed development, residential or commercial or residential developments along the different corridors to

understand how that might impact traffic on those roads.

We evaluated programmed roadway improvements, whether there is going to be any construction, has there any been any construction, anything that would impact our haul routes.

And then we also compared the residuals trucks in that operation with the reservoir dredging operation that occurred in the late nineties to just do a comparison to understand what dump trucks went out and how many of these trucks are proposed to go out.

So here is a little information. Essentially, the basic information establishes a basis for which we are able to define on a technical level the impacts. And the basic information is that the local area road maintenance work, and this is a little bit of what I said before, operates within acceptable level of service standards for the City's Department of Transportation. The level of service ranges from A to D and the local service differs in different places along the route, but it's within acceptable level standards right now.

However, there is one capacity constraint that was identified and it's during the morning peak hour

at the unsignalized Loughboro Road and Dalecarlia Parkway intersection.

Also, the traffic analysis evaluated that there is planned development, there are pedestrian, and there are security concerns along some of the routes, and that will impact our ability in assessing which routes are going to be more suitable than others.

Thanks a lot.

So in conclusion of all of this and further general view, we've got the numbers, the hauling operations are expected to have a negligible impact on existing and future traffic conditions on all haul routes.

Well, why is that? The residuals truck volume is consistent with existing road capacity along the haul routes, in other words, does not trigger a change in this term, the level of service.

But there are other things -- so all haul routes are equal along -- with that measurement, but there are other things to consider when we look at these haul routes.

We've learned that there are planned development and security concerns along some of those

routes and that really will force them to be dropped from the proposed action moving forward.

We have talked, as a team, that best management practices in terms of trucking and residuals loading can further limit truck loads during the morning peak hours. When we evaluate D.C. and Maryland and Virginia, all require that the evaluation have trucks compared against the peak morning and peak afternoon congestion periods to understand those impacts. We'll going to look at reducing that, those trucks during the morning peak hours. We don't have any trucks going during the afternoon peak hour.

And also in terms of mitigation we'll be looking at limiting or restricting truck parking or standing along adjacent roadways.

I'll just cover two other points quickly and then turn it back to Glenn.

Other concerns that we've had are related to odor and noise. Quickly, odor, there has been some concern that this facility will smell. Water treatment residuals are essentially an earth-like material. And we have a bucket of it somewhere. Dalecarlia treatment residuals, it looks like mud. It's not very pretty, but

later on if you want to come up and smell you can see that it contains really no organic material and has no odor associated with it.

The noise is a big concern, both noise of trucks -- First of all, trucks will not operate during the quiet times in the neighborhood. That's in the middle of the night, that's at nighttime. That's in the very early morning hours.

We've done a lot of noise monitoring for existing conditions throughout the neighborhood, both in sort of the noisy or active parts of the day as well as during the nighttime hours to understand what are the background conditions of the quietest times and the noisiest times. And we've also looked at the noise generated by the building and what are those -- what is that equipment expected to be like, you know what will it sound like. Essentially, dewatering facilities create noise.

However, the layout of the facility, as well as the construction materials used and the building design, could prevent noise from impacting neighbors. Essentially, what we expect inside, about 84 decibels in terms of the operating things that we need to be

concerned about for worker's safety. When you close the door and stand outside about five feet away, our modeling indicates it will be about a 60 decibel range.

Noise attenuates or sort of disburses the further you get away from the facility due to a variety of conditions. We have modeled that.

Look at the last bullet there, the facility will reserve -- excuse me, will result in 0.4 or .4 percent change in decibels from existing background conditions. Well, what does that mean to anybody? The standards for assessing impacts of noise are based on if it's a 10 decibel increase, that is what is technically termed as a noise -- or significant noise impact. And a 10 decibel increase is on the logarithmic scale about twice the noise level.

So, if you double the noise of something, it's about a 10 decibel increase. We expect about a .4 percent change.

And I'll turn it back to you, Glenn, for the rest of it.

MR. PALEN: Thank you.

The next item I would like to talk about are some of the public concerns as a follow on to what

Jed was saying related to the light pollution and visual issues.

In the case of light pollution, we're not expecting a large amount of light to be emanated by the building. We're going to consider how to avoid that by looking at the design of the lighting system. So we will avoid putting large lights on top of the building that would project out onto the site.

And we will also look at how we do security lighting around the facility so as to minimize the impact on neighbors, keeping the height of the light pole low, making them downward facing lighting, as opposed to a more projective lighting. So that is a thing that can be dealt with in design and the effects of that can be minimized.

On the visual side, we basically had two types of comments. One surrounds the location of the building and the facility on the site, on the proposed site. The second has to do with the building height itself.

And one of the recent events that we've had occur was we had a requests from some residents on the Leeward Place location, which is shown over here on

the left, who came and talk to us about some of these issues. So we did that as part of our EIS process.

They suggested a couple of different things. The first one we're going to talk about here is modifying the residuals site layout to minimize visual impacts. So let's just kind of go over this layout here to get you your bearings on where we are.

As I mentioned, Leeward Place is over on the left. The Capital Crescent Trail would be sort of running along the top of the diagram, horizontally. And then the long building on the right-hand side of there is what we sometimes call the shed. It's an existing facility adjacent to the maintenance facility on this site.

The four circles with the rectangle in the middle is the location we had shown in the feasibility study for the proposed gravity thickeners, which are the four circles, and the residuals processing building, which is the rectangle in the middle.

Just a few more background facts. The gravity thickeners are about 21 feet tall as envisioned in our feasibility study. And the rectangular building in the center has a sloped roof with the peak elevation

about 78 feet above the existing grade, just to give you some elevation numbers.

So, in the course of our conversations, again some suggestions were made about how one could modify this layout to improve the situation and lessen the impacts of the neighbors.

This is a very preliminary sketch of what one concept might look like. That is certainly not the answer. That's not the final statement on the subject. But what I wanted to do was to show that we are listening to folks. We're willing to consider alternatives in the layout of the facilities and the height of the facilities so as to minimize impact.

So the basic concept here was, well, what if we cluster the four thickeners, which is the low structures, together, make those -- reposition those so they are closer to the neighbors to the north or to the west, which is on the bottom of the diagram here. North is directly left.

And instead of putting the dewatering building in the center of that site, which is probably the biggest visual impact, especially for neighbors to the north, consider pushing it a little further to the

top and to the right of the diagram so it's less impact on the neighbors.

We took a look at that. I think that is probably a feasible alternatives that we will consider further as we move through the EIS process.

Some other features shown here, the little arches outside of the circles might be another way to lessen the visual impact, having earth bermed up around the thickeners so their apparent height is not as dramatic from the surrounding area.

Additionally, we received comments focused on ways to reduce the building mass, or focusing on the building itself. Those might include partially burying the first floor, essentially lowering the entire building, either partially or the entire floor into the site, into the ground.

Obviously, we would be somewhat constrained by the road design to get trucks in and out of a basement type of arrangement given the relatively small site area we have to work with. But that is something we would probably take a look at.

Other ideas included modifying the building's roof slope. Instead of a single pitch, like

this, have a multiple pitch that gives it a softer look and makes it look like the building is not as high as a visual way of doing that. Alternatively, maybe just look at lowering the roof height.

The last two alternatives mentioned here, we would have to consider how they might impact the functioning of the building. Obviously, some of them might involve making the third floor area of the building smaller in foot print. That might affect how we lay out our dewatering facilities.

But these are things that we are willing to look at to assess how to minimize impacts on the neighbors.

I guess in general what I would say about this process is this is sort of first conversation of this type with neighbors. I would expect that it would be more. Some of these things would be worked out in the design process. Some of them involve more details associated with the design of the building. Some of them are more general.

So I don't want to portray this as the one and only conversation that we plan to have with neighbors. There was a request for our -- a meeting with

them and we're willing to do that and we're certainly willing to continue that.

MR. CAMPBELL: That is the first segment of our little talk. We have another segment. I think it's at the end of yours.

MR. PETERSON: Yes, it is.

MR. CAMPBELL: Another segment. There has been a lot of work and a lot of thought by members of the community on identifying ideas or alternatives for this residuals management strategy. We would like to talk a little bit about those and then get on to your questions, because I know you guys have a lot of things to say.

So I'll turn it over to Mike, who will run through that history and then what some of the other ideas on the table are.

MR. PETERSON: I'm Mike Peterson. I work for the Washington Aqueduct. I'm going to go over some of the different alternatives that people suggested during the comment period, which ended yesterday, November 15th.

We'll talk a little bit about the background of that comment period and in addition list the majority of the alternatives. It has been tough to

process through all of them. We got a lot of them yesterday.

In addition, based on some of the trends in the alternatives suggested, I'm going to kind of discuss a little bit some of the boundaries, some of the limitations that we're working with in this project and let you know what our plans are from here on out.

We extended the comment period in order to allow stakeholders, you, members of the public, and others, to suggest alternatives that may not have already been considered as part of this Environmental Impact Statement process.

The deadline was yesterday, November 15th, as I said. The goal of -- for each of these alternatives would be to allow us -- and the goal of the project at the end of the day is to help us comply with our Clean Water Act permit, which probably most of you are relatively familiar with.

The new alternatives that were suggested by the public in this comment period would then -- or are now going to be screened against the same screening criteria that the original 26 alternatives were screened against. And, if any of those alternatives that were

identified passed through the screening process and identified as feasible, then we would take those and add them to the list of the three alternatives that were found feasible, and then the no action alternative. And they would be studied in more detail in the draft EIS to fully understand the potential impacts.

We received, as Jed indicated earlier, over 100 individual specific suggestions for alternatives. Some of them were variations on alternatives that we already considered. Some of them were variations on what we're referring to as options, things that could be -- things we could do maybe in multiple alternatives. And then some were entirely new alternatives and entirely new options that hadn't been considered before.

I'm going to just go ahead and read through these. So there's a number of slides.

The first item is store the residuals in part of the Dalecarlia Reservoir prior to processing them. The next one is to move sedimentation processes and/or the residuals processing facilities somewhere else, preferably closer to the capital beltway.

Construct a new pipeline in the Capital

Crescent Trail right-of-way or existing Metro right-of-ways. Construct new pipelines inside of or above various sanitary sewer pipelines to the Blue Plains Wastewater Treatment Plant, with or without thickening at Dalecarlia Water Treatment Plant.

Use existing piping to transport residuals to the Potomac River and then from there barge them to some other facility, such as a bio-reactor, landfill, or the Blue Plains Wastewater Treatment Plant or possibly something else. Also, construct new pipelines within or above existing sanitary sewer pipelines to get to the WSSC Potomac Plant.

Construct new pipelines across the river to get to the Fairfax Country Water Authority Corbalis plant. Another alternative was suggested to build any -- wherever it would be, the residual processing facilities underground rather than at grade.

Another suggestion was to switch the coagulant that we use, which is current aluminum sulphate, or alum, to some other type of coagulant, such as polyaluminum chloride, which could potentially reduce the amount of residuals that -- that are accumulated or produced.

Also, it was suggested that we consider other disposal options, such as possible reuse like in -- like one option that was -- that has come up is using the material as a produced or, you know, a piece of making cement, in cement manufacturing.

In addition, one suggestion was to basically overhaul the entire Washington Aqueduct's water treatment system processes and use a totally new system in order to eliminate the need for the coagulant and to reduce the amount of residuals that we would need to handle. And so this would require significant changes in the existing processes.

Utilize an existing abandoned sewer or other abandoned pipeline in some way. Construct a new pipeline in the bed of the Potomac River to the Blue Plains Wastewater Treatment Plant. Construct a new pipeline to the Blue Plains Wastewater Treatment Plant on the Virginia shoreline, instead of the Maryland shoreline and you would need two crossing of the Potomac River.

To construct new pipelines within or above existing sanitary sewer pipelines or our Washington Aqueduct raw water conduit to a new processing facility on federal -- local federal installation.

Utilize the D.C. WASA or Washington Area, what is it, Sanitary --

MR. JACOBUS: Water and Sewer.

MR. PETERSON: Water and Sewer Authority, our main customer, to their combined sewer overflow holding tanks, I guess either existing or future, and then later pump those residuals to the Blue Plains plant.

Locate the processing building, instead of what we show on the feasibility study, another location somewhere at Dalecarlia or locate the processing facility not at Dalecarlia, but at the Georgetown Reservoir, either next to it or inside one of the existing basins.

Also, one of the suggestions was to remove the river silt or sediment before it even gets into the conduit at Great Falls and Little Falls, which are our surface water intakes on the Potomac River. And then another suggestion was to scrape the surface water intakes all together and use groundwater as the source of the raw water for the Washington Aqueduct.

And another suggestion was to make our river intakes, surface water intakes, more like the Fairfax County Water Authority intake, which is a mid river intake.

And another suggestion was to co-utilize existing or new pipelines for multiple purposes such as maybe sewage as well as residuals.

And then the final alternative here is to use -- to build a new road to the Clara Barton Parkway from the Dalecarlia facility or maybe another facility and then use the Clara Barton Parkway.

Some of the boundaries that I think it's important for us to, you know, let you know, we kind of are operating under these limitations. We cannot make other water treatment plants or wastewater treatment plants take our water treatment residuals. It's their discretion to do it or not -- to take it or not.

In addition, other federal landowners are under no obligation to let us use their land, sell us their land, grant us right-of-ways on their land for managing water treatment residuals.

In addition, in order to comply with the Clean Water Act, the Washington Aqueduct is obligated to comply with our Federal Facility Compliance Agreement, which in part -- in part is the schedule which we have presented many times before in our documents and at these meetings. And it's a very restrictive, difficult

schedule that is -- you know, we have to do that.

In addition, we need to continue to supply drinking water to our customers.

Let me kind of go over what our plan of action is now. We're going to take these alternatives and we're going -- like I said before, we're going to screen them against the same screening criteria that was used earlier with the original 26 alternatives.

We're going to present this analysis to you and anyone else who wants to look at it on our website when we complete that initial screening analysis.

And then any alternatives which make it through the screening process will be added into the detailed analysis part of the draft Environmental Impact Statement. Then we will identify the alternative which best balances all of the potential impacts on all of the stakeholders, the environment, our neighbors, while keeping in mind operational -- operational issues for the water treatment plant.

And then we are planning on publishing the draft EIS for public review and comment. And that's it. I'll hand it back over to Jed.

MR. CAMPBELL: We're done. It's your

turn. The last time we were together -- I will remind those of you who are here, try to be mindful of each other and limit yourself to two questions at a time. I recognize that some people may have multiple points that they would like to make. If someone is in line behind you or on the other side of the aisle, if you could sort of recycle back to the line and let someone else talk, I would appreciate that. So, if somebody wants to engage in a lengthy conversation, I will probably cut you off and allow the other people to talk. And we will be entertaining questions at the microphone so that people can get a chance to hear each other well and our recorder can make sure that she can hear it and it's entered accurately into the record.

We started with you last time.

[redacted]: Oh, thank you.

MR. JACOBUS: Before we proceed, I would say there are a couple extra seats down here if any of you in the back of the room care to come down and sit.

And Delegate William Bronrott came in a little late and I wanted to acknowledge his presence from the Maryland General Assembly.

MR. CAMPBELL: I will start here on the

1 left since we started with you the last time.

2 UNIDENTIFIED SPEAKER: I will try to be

3 succinct. We represent the Western Avenue Citizens

4 Association. This is [redacted], the interim

5 President. And I will be quick.

6 We don't believe you can truck along

7 Western Avenue or Mass. Avenue or any of these roads for

8 a number of reasons.

30-1-GA

9 One, several years ago when we first

10 stated this, two or three years ago, I asked all of you

11 that if a pedestrian is killed on any of these streets,

12 which is highly actually, if there is any damage to any

13 car, if one of your dump trucks hit any car, any person,

14 any injury, any damage, I asked you could we sue the Army

15 Corps of Engineers or would we sue the trucking

16 contractor.

17 MR. CAMPBELL: Do you know the answer to

18 that question.

19 MR. JACOBUS: I'm not an attorney, but I

20 would be -- well let me just say, I don't remember saying

21 that, or maybe I did.

22 At any time we are engaged in activities

23 that interact with the public, if we have our own vehicle

-- our own Washington Aqueduct vehicles on the road or whether we a contractor, we have an underlying responsibility for our own actions and should we strike or injure someone, there certainly is a claims procedure that is entered into through the -- the Department of Army Claims Office. That would be the step one.

And then depending how that claim was adjudicated, then other judicial action could follow. I do not categorically make any statements that no lawsuit could ever be brought. If there were to be an incident -- and we have been, with a lot of care on our side, very careful not to cause any kind of property -- any kind, whether it be property or personal injury, that is caused by us there is an existing procedure to -- to deal with that and make a proper adjudication.

UNIDENTIFIED SPEAKER: Can I make a make a second point, because there is so many to speak?

30-2-GA, GC, MA

The pollution and damaged caused by the trucking, to say nothing of the construction of this unit, would overwhelm any of the pollution that is being done to the river. So I contended two years ago that this is much to do about nothing. I don't think the EPA, although you believe it, can require you to carry out

procedures that will cause more pollution than you are remedying.

So the noise, the damage. No one has done a study, for example, of the amount of gasoline -- pollution created by gasoline and trucks. That has not been done by you all. We're going to have it done, by the way.

But, in fact, by their legal structure, they can't ask you to pollute more than you're solving. So, actually, the facility and the truck route is going to be fundamentally illegal.

Thank you.

MR. CAMPBELL: We are doing quite a detailed analysis of air pollution from truck generation and that is being compared to the air quality standards in the metropolitan region. So that is part of what it is and you can compare your study with the one that is being done for that. So that is -- that is being done.

I'll switch over here because we're moving back and forth.

[redacted]: Okay. My name is [redacted]. I'm here representing the Brookmont Civic League.

1 I would like to dwell upon the comments

30-3-BB

2 that this gentleman just made. Our concern is that the
3 -- that the notion that the plant has to be built at
4 Dalecarlia simply isn't supported by the facts.

5 The three alternatives that we have been
6 offered basically seem to focus on a study that was done
7 in 1995 by Whitman, Requardt and Associates in Bethesda.
8 It basically was an encyclopediaed view of the questions,
9 As we understand it, here was building specifications,
10 equipment choices that was broad in its scope and it
11 basically was contained in five volumes. Everything was
12 covered.

30-4-GA

13 Our feeling was that the report
14 incorrectly assumed that the low cost was the best
15 alternative and the highest priority for the District of
16 Columbia ratepayers and the ratepayers in Virginia was to
17 come up with a low cost solution.
18 But it didn't take into concern the impact
19 that it would have in these neighborhoods. So the train
20 was put on the tracks by Whitman and Requardt. It was an
21 exhaustive study and yet we can't see it.
22 I'm not a ratepayer in the District of
23 Columbia. I think there are some here who might want to

1 know what their money was used for and why is this report
2 not being made available, despite a Freedom of
3 Information request to spring it.
4 My understanding is there are ratepayer
5 problems and so forth you can hold it back from a federal
6 request. I think that is inappropriate. I think it
7 violates in every sense the National Environmental
8 Protection Act. And I wish you would go back and revisit
9 this because I think that basically what got you started
10 on this notion that we have to build it in a residential
11 neighborhood and truck the sludge out of quiet
12 residential streets, the whole notion, by the way, I
13 think are the mistakes in the report itself.

30-5-MB

14 But the first question is why can't see
15 it.
16 MR. CAMPBELL: I don't believe there is
17 any secrecy to the document whatsoever.
18 [redacted]: Why wasn't it provided.
19 MR. JACOBUS: I will. Thank you. I'll
20 very quickly respond.
21 We do have a Freedom of Information
22 request that is much more broad than that study. We have
23 accumulated all of the documents we believe are relevant

to the request and supplied them to our Office of Counsel in Baltimore. And I made a recommendation to them that the majority of that study be released.

In the five volumes, one of the volumes is our engineering drawings and diagrams that represent a lot of the fixed infrastructure at the plant. And we believe there are legitimate security reasons not to have engineering drawings out in the public sector.

But the analytical work that went into that particular product of -- of what about the composition of the solids, what are some of the processes that might be used, that is -- that is very much just general thought pieces that can and should be released. And it will be released as soon as our counsel in Baltimore responds.

[redacted]: With all due respect, Mr. Jacobus, and I do respect the Corps position on this, I think what you have to do is release the report. There really isn't security information in there that would be any more detailed -- I actually -- there was a portion of that latest that I saw. I wasn't allowed to copy it.

There is nothing more detailed in terms of security than is in your latest consultant's report. A

national security concern, an executive privilege concern, seems really, really, really way out of the bounds of the rules of the National Environmental Protection Act. You're not complying with -- with not just the law, but the spirit of that law.

MR. JACOBUS: If I can respond to that by -- and answering -- and responding to the other question at the same time.

There is nothing in the report that I have any interest in withholding from the public because I'm embarrassed nor is it an indication of, oh, yeah, this is why we're doing that. That will all stand on it's own. We have a legitimate answer to that question.

[redacted]: Okay.

MR. JACOBUS: But the report itself -- let me say that one of the reasons we're in this room here tonight with so much interest, and we do appreciate it, is that in 1994 when we commissioned that study to comply with what we believed the EPA was going to issue as a discharge permit in 1994, we did take -- we started from the standpoint of we would -- we inquired of the D.C. Water and Sewer Authority, what are the capabilities of your receiving the solids. We got an answer back from

them at the time saying that it was inconsistent with what they could do.

So we then -- I was not there at the beginning of this, but I think I'm reporting this fairly and accurately. We then said, well, we will take care of this project ourselves. So we went up with the idea of building the processing facility and with the idea of trucking. In the meantime, there was no ability to go forward with our project because EPA didn't issue the permit and there were funding problems. And we started dredging the Dalecarlia Reservoir and that's when the Western Avenue Citizens Association and the CRUD, the organization that was originally formed, that's the Coalition of Responsible Urban Disposal of Dalecarlia. That's John Finney. That's how I met him. We then look at how we would truck to dredge the reservoir.

So we committed ourselves that when we got a permit from the EPA, it was eventually issued in the spring of 2003, that we were going to take a completely fresh look at this. Now, we can't ignore the fact that, yes, we did that study with Whitman and Requardt with the idea that we would build a solids processing facility and truck.

We know there is significant effect in building that facility, not only on the property, to the neighbors, but also due to the trucking. And we wanted to look at a complete open study. So that's why we looked at what we thought were some interesting and -- three to four not really developed alternatives came out of the 27.

And those -- sending the dewatered material or pipe the dewatered material to Blue Plains avoids trucking and the facilities. The monofill option was in place of trucking, but not the facility. So we ended up with a series of alternatives during this three-year investigation that you have helped shape that did not come from a mind set of just, okay, here, we're going to pop open the report of Whitman and Requardt --

[redacted]: Sorry. If I can interrupt you for just one moment, if I may. I appreciate your answer. The sense one gets in reading the later report, the Hill report, basically the mentioned the earlier report cited the location of the plant, it's use, and basically the justification of screening criteria mentioned several times. It seems to me this is a matter of elementary fairness. We ought to have a look at it

30-6-MB

1 during the comment period, not on the last day or after
2 the comment period.
3 So I appreciate your comments, but I can't
4 agree with them.
5 One option that it seemed rather obvious
6 in it's omission in the 26 alternatives was the use of
7 the pipe -- the pipeline within the existing the
8 Dalecarlia pipeline, a forced line. You considered two
9 options for basically dumping all of the residuals into
10 District Interceptor and knocked them down in a way that
11 we really couldn't agree with. Although, I must say,
12 basically a group of amateur sleuths here -- I mean,
13 we're not -- we don't have the hundreds of collective
14 years that the Corps has at its disposal to come up with
15 a technical response, particularly in this abbreviated
16 response period.
17 So, one thing that appeared to us in any
18 case was if you can't deal with the digging of an open
19 trench through the C&) Canal and on the Mall, we can

30-7-DA, DB

20 understand that. We suggest that you put a force line
21 within the District Interceptor and run it down to Blue
22 Plains.
23 We were told -- I'll get to that --

30-8-AB

1 We were told initially that that was cost
2 prohibitive and yet no study was done on the cost. There
3 were no estimates. It wasn't even included as an option,
4 which we regard as, rather, railroading these three
5 proposals and, in truth, as we're learning tonight, one
6 proposal through. That approach just wasn't even
7 considered.
8 When we raised costs, we learned there we
9 no cost estimates done.
10 Would you like to comment on that?
11 MR. CAMPBELL: I would and then that puts
12 you at two comments and I know you have more. I assume
13 you have more. But we'll address that and I would like
14 to go to some others.
15 But, essentially, it's can you put a pipe
16 within the pipe and run it down to Blue Plains. We had
17 put some thought into that.
18 Glenn, I'm going to turn to you for some
19 feedback on the pipe within a pipe process.
20 MR. PALEN: There were kind of an
21 evolution of activities that occurred related to the Blue
22 Plains. And this does fit into that. It was part of the
23 thinking. I am not saying that to indicate that I

wouldn't be willing to considered it again. I think we should take a fresh look at it as you've mentioned in your comments.

But let me just kind of tell you how the things unfolded as we looked at things. One of the first things we did associated with all of the Blue Plains alternatives was to try to figure out not so much how would we get from point A to B, which was obviously important, but what would the impact be on Blue Plains, the wastewater treatment plant.

So we met with them a number of times and they sort of gave us various impact -- various input from various parts of their organization, the engineering group, the management group, that sort of thing.

Fairly early on in that process, it became clear that it was going be very difficult for them, if not impossible, to just accommodate our residuals into the front end of their wastewater plant in any form using any method of delivery.

So that was one of the reasons why, although we considered it in general, we didn't pursue it further because we realized at some point that the issue may not be how we get there as much as can this number of

1 pounds of solids be accommodated by the wastewater plant
2 without requiring a 50 or a 100 percent increase in the
3 size of the solid handling capacity at Blue Plains, which
4 is clearly an outrageous cost.
5 [redacted]: We have done some
6 investigating on that as well and we would like to talk
7 about that. If I might have, with your indulgence, maybe
8 10 or 20 seconds to sum up this side of the argument.

30-9-FB

9 What we are concerned about is that there
10 is no real hard analysis or work and it seems that that
11 impact is showing. We're concerned about what might be
12 driving this. One take on it might be that you have
13 basically invested millions of dollars in this Requardt
14 study. You basically then updated it at a period where
15 you were forced to -- you running out of time now to
16 restart the process over again and do it the right way.
17 And that's an analysis that doesn't really
18 take a lot to get to. I mean, we haven't seen the study.
19 We know it was very expensive. You know you all that you
20 all have similar talent. And we know the EPA timetable
21 is running against you. We sympathize with that, but we
22 think is a matter of fairness the process ought to be
23 opened up again and we ought to look at these

1 alternatives, and have legitimate community involvement.
2 Thank you. Thank you for your time.
3 [redacted]: My name is [redacted]. I'm
4 the chairman of the Coalition for the Capital Crescent
5 Trail. And, as some people here know, we have been
6 involved with lobbying for and working on getting the
7 trail in place since 1986. So we have obviously done a
8 fair amount of dealing with the Corps at various points
9 along the way.
10 One question that we have that may have
11 been addressed in other meetings, but other board members
12 who have been here have not reported back, and that is
13 with the option C, the piping option. Where is that --
14 where will that be located and does it take advantage or
15 make use of the Capital Crescent Trail corridor? Would
16 the corridor be impacted by that?

30-10-DA, BB

17 MR. CAMPBELL: The piping option, as it
18 stands right now, does not make use of the Capital
19 Crescent corridor. It really started, as Glenn was
20 saying, with the whole premise that the residuals would
21 go in the existing Potomac Interceptor, put in the sewer
22 and put it to the wastewater plant. And that evolved
23 into various other considerations, still using that

1 corridor down to -- down to Blue Plains and not using the
2 Capital Crescent Trail.

30-11-BA, BB, BC

3 [redacted]: The second question has to do
4 with the facility that would be built on site. I was
5 trying to tell from the map you put up earlier --
6 reference was made to the Capital Crescent Trail being
7 sort of at the top, but the drawing at top is not very
8 precise.
9 And so we are obviously very interested in
10 where the facility would be sited with regard to the
11 trail and it's obvious visual impacts and, you know, the
12 noise that you made reference to may not be so great once
13 you get afar away from the site that where there are
14 houses located, but obviously it is very close to the
15 trail. And that could be a significant noise impact to
16 trail users. And, as you all know, there are many, many
17 thousands of trail users every day.
18 MR. JACOBUS: Just, if I could, this is
19 our property line and the Capital Crescent Trail, the
20 railroad trail goes essentially right here. So and then
21 it goes through the Dalecarlia tunnel.
22 So the -- right now there is an existing
23 maintenance building, that low brick building, as you

come across and the bridge is right here.

[redacted]: So that is your road that goes under the bridge, that side road?

MR. JACOBUS: Well, almost correct. This road goes around to the back. The bridge is right here.

[redacted]: Okay.

MR. JACOBUS: The bridge is right here. SO the trail comes along here. So, in this space -- this is an existing structure here and there is a -- I don't know, a motor pool here. There would be a -- if this option were selected and whatever the final architecture treatments, clearly there would be a structure that is not there next to the trail. Just as we would look at the options of screening and softening the look of this and respecting the views and the lives of the neighbors here, we would similarly work with our architects, work with the coalition, work with the National Capital Planning Commission, all of that, to see what that effects would be what mitigation, whether it's plantings or whatever it would be, if this option were to be picked.

So were much aware of the trail being there.

[redacted]: It's really hard to tell what the scale is, but what would you say the distance is -- I know this isn't a final site plan, but what would be the --

UNIDENTIFIED SPEAKER: That's what it would like.

[redacted]: Well --

MR. CAMPBELL: Glenn is going to look on a hard copy and see if he can understand the scale.

MR. JACOBUS: Let me make sure I understand your question.

[redacted]: I'm trying to see what the separation would be from this facility building to the trail.

MR. JACOBUS: From here to here, it's probably about 100 feet.

MR. PALEN: No, it's more. It's about 200.

MR. JACOBUS: A hundred and fifty-feet.

[redacted]: When you were pointing along --

MR. JACOBUS: Right. This is -- I mean, the trail is here, and this is here. From here to here,

for instance, before you went of in the tunnel, of course, there is a tree line across here. But nevertheless that's probably 50, 60 feet from the trail.

[redacted]: And then into the main building, it might be more on the order of 100.

MR. JACOBUS: If it were in this configuration. Earlier -- maybe you weren't here when we looked. Flip to the next slide.

[redacted]: Yeah, I saw that.

MR. JACOBUS: So, if we flip things around -- nothing -- this is -- nothing is designed. We're just talking. These are sketches. These are ideas based on what this kind of facility would have to do to accommodate the loads. But if it were something like this, these thanks remain approximately where they are. But the relative position of this set of facilities to the trail remains about the same.

[redacted]: And what is to the west of that at the bottom of the drawing there?

MR. JACOBUS: Here? This is a fence line and then the hill drops off. This is National Park Service land. And then goes out to the Clara Barton Parkway.

[redacted]: Right. I'm aware initially the Corps wanted the trail to go around the back of the facility at one point.

So is there no way that that whole facility can be rotated -- essentially if you took this drawing and you rotated it clockwise down towards the back of the property --

UNIDENTIFIED SPEAKER: Brookmont is there.

MR. JACOBUS: There are certainly some competing interests here. But let me just say that that is a representation on the ground of if a facility were built to do this where it would lie with respect to the residents in here, the residents in Brookmont, and the Capital Crescent Trail.

And so I think I understand your concern is as you jog down the trail, as you use the trail, you don't want to be alerted to the noise and you don't have a visual distraction.

30-12-BB

[redacted]: Well, I mean, if you think about it, in the wintertime that part of the trail would be a constant shadow. It would be -- if you have water on the trail then you've got icy conditions, so it will be more than just a visual thing.

MR. JACOBUS: I'm not -- Okay. I don't think some of the water from it, because we're not affecting the trail at all.

Mr CAMPBELL: We thank you for that comment. We also -- an additional analysis of all of the alternatives, Capital Crescent Trail is featured in that, particularly their view from the bridge Mr. Jacobus was talking about.

[redacted]: Right.

MR CAMPBELL: Perhaps the most prominent, we've even done trail usage counts to measure different peak periods during the day, how often that trail is used and factor that in to how many people use the facility. And so that facility and so that level detail is going into the draft EIS.

[redacted]: Thank you.

MR. CAMPBELL: Let me switch sides.

[redacted]: My name is [redacted] I'm the president of the Bon Air Civic Association, not necessarily speaking for the group, but we are the closest community to the dewatering facility. Our place is part of Bon Air Heights.

A couple of questions both relating to

30-13-BC

noise and visual. The slide you had up there with a decibel levels was described as .4 percent increase, which is negligible. I suspect it's 40 percent, because of its .4 and no percentage. And .4 is 40 hundredths and that's 40 percent. I don't know if that's the case, but we would like it clarified.

MR. CAMPBELL: No, it's 4 percent, I think is correct. I'm not --

[redacted]: Well, that's critical.

MR. CAMPBELL: We will make sure we're clear with that. But I believe it is -- I believe it's 4 percent, not 40 percent.

[redacted]: Point 4 was what was on the screen.

MR. CAMPBELL: The scale is different.

[redacted]: If it's a .4 decibel increase, that needs clarified.

MR. JACOBUS: The point is the analysis at this point, we have the ability to construct the building and whatever we put in the building so that there will be a negligible noise increase with the building and operation. Now, the clear question is that's fine, but what about the trucks coming to and from

the building, what about the receiving and all that. And, obviously, those are things which we have to design because we certainly recognize that we have a noise threshold that we must respect because there is the quality of life issue that you have in your homes that must get accommodated by this facility. There's no question about that.

And what I think what we're trying to say here was the capability exists in structural design to build a building that is quiet. And then it would be our challenge to operate it in a way that it would remain quiet and you would not -- the expectation is you would not now it was there and operating just by opening your door and listening. And so that is probably the easiest of the factors to mitigate, light being the next easiest one. The most important one to mitigate is its mass and how it sets and what its appearance would be.

[redacted]: That's the next question I have. And I would like to have some clarification on the .4. I don't think anybody is quite sure what that is.

30-14-BA

On the visual thing, is it possible to get $50 worth of helium balloons and go out and stakeout the height of the building and the location of it? It is

being turned, but it is still in that constraint. And maybe notify us when it's done so people can visually see what they're up against?

MR. JACOBUS: Absolutely. That's an excellent idea and we will certainly do that. We are trying to do two things at the same time. I want to be clear that -- the presentation so far that we have made sounds like, you know, we're reading to start building those buildings. That is right now emerging as a preferred alternative as we evaluate other suggestions that have been suggested to us. There are going to be other alternatives that come into the mix. But we want to be very clear that -- that that option is -- is, we believe still available to us to move forward.

But the actual footprint, the height, the shape, the look of the building, is still completely undefined, other than that must match its operational needs. But, as we said, we would look to the effect of lowering it, straightening it out, maybe roof lines. So that kind of design, we would want to work very closely with the affected immediate neighbors and the Capital Trail people to make sure that if that emergences as a preferred alternative, then as we begin the design, there

will be a lot of further consultation to work with the people who would see this to make it as good as it can possibly be. But we want to be able to specify in the EIS what we think its characteristics need to be to do the job. But won't have the design, per se, but we certainly commit to working with the neighborhood on design.

[redacted]: The design we've seen so far certainly has certain sizes that are needed of 21 foot high this and 70 foot high that. And that mass, whether it has a flat roof or a sloped roof is -- a sense of, you know, is it the size of the RFK Stadium? Probably not.

MR. JACOBUS: No, it's a lot smaller than that.

[redacted]: It may be the size of, you know, Whitman High School. Nobody has a sense of that, I don't think, unless we can see the scope of it.

MR. JACOBUS: We hire architects. And we like to think architectural -- we like to think how we can do this function and how the facility as we build it adds something of value to the landscape. And we -- the actual massing of it very often presents alternatives

that are -- have yet to be explored because we haven't honed in on using this option.

But what we are saying, that there are ways to modify this initial -- excuse me, initial kind of block diagram, but there has to be a caveat that the building has to accomplish what its set out to accomplish, is the process X number of gallons of the stuff a day.

30-15-BC

[redacted]: Is the truck load inside -- relative to noise, is it inside or outside?

MR. PALEN: Inside.

MR. JACOBUS: Well, it would be inside. It would be inside. The idea is simply that you get the wet stuff, you dry it and then you get it into a hopper and by gravity or conveyer it would go into the bed of the truck and the truck leaves. So, yes, we would bring the trucks in and then have them leave.

So just as today in normal operations we have deliveries and trucks going around. There is a truck area in that back area. There would be a little bit of truck traffic in the building of this. It is defined as interim, nine trucks a day come through are a possibility.

1 [redacted]: Okay, thank you.

2 MR. CAMPBELL: We're going to move over to

3 the other side, to the podium.

4 [redacted]: Thank you very much.

5 [redacted]: My name is [redacted]. I am the

6 president of the Palisades Citizens Association. I don't

7 have any questions.

30-16-BB

8 I wanted to let you all know how we feel

9 about what is going on. And I don't want to rotate that

10 building. We want to eliminate that building.

11 These are the comments, so that everyone

12 here knows, that we filed with the Army yesterday, Mr.

13 Jacobus, Mr. Campbell.

14 The Palisades Citizens Association opposes

15 the proposal the truck through the Palisades and other

16 District neighbors the residual treatment solids that

17 result from the water treatment process from the

18 Washington Aqueduct.

30-17-DA

19 We believe you should revisit the only

20 true permanent and environmentally sound solution to this

21 process, namely construction through horizontal boring of

22 a pipeline to the Blue Plains Water Treatment Facility.

23 Such a pipeline would avoid construction

of a centrifuge, make dumping unnecessary, and preserve the character of the affected land in all of the communities that will be impacted.

30-18-CA

We urge your rejection of Alternative 2 that envisions disposal of solids of a landfill constructed in the greater Spring Valley area.

And support is noted to Alternative 5, the construction of the pipeline to Blue Plains.

I have a few comments. We hope you will be able to re-evaluate the decision to not make that one of your alternatives. The very fact that the entire meeting tonight seems to be focusing on why that is unnecessary suggests to me that the -- the cart is in

30-19-GA, GB

front of the horse. That is the only real solution because 20 years from now, with those 10 truck in and 10 trucks out, after 106,000 trucks have been through here, you're still going to be bringing trucks through the neighborhood. They will still be there.

And the Corps of Engineers is a legendary Washington lobbying machine. It has lots of friends in the Congress. If this was a problem in Arkansas or along the coastline, the Corps would be in there, they would be visiting a member of Congress who actually had a vote.

They would be talking about an authorization. They would be talking about an appropriation. A they would get the money.

And we could help you do that and we want to help you did you.

There is a lot of politics in this issue. And the water that we're talking about goes to the White House. It goes to 435 Members of the House of Representatives. It goes to 100 Senators, all of whom hope to be President. And it goes to nine Supreme Court Justices.

We have been good things in the Palisades. It was a Palisades resident by the name of Justice Douglas who saved the C&O Canal and made it into an actual park.

It was Peter House a lot of other people who created Capital Crescent Trail when the CX -- the C and X railroad was going to hang 121 houses in between the aqueduct and Arizona Avenue. And we went to work on that problem.

And I think we are prepared to help you all with your problem if you will reconsider the only sunset way to take care of this waste I am not a

scientist. I'm a political scientist, in effect. And I think you all really need to give serious consideration to be revisiting the solution that will alleviate, I believe, the concerns of every single person who is sitting in this audience.

Thank you.

[redacted]: My name is [redacted]. I live in the Westmoreland area and I have one public health question and then want to comment.

30-20-KA

Reading about the drinking water analysis and they contaminates, I am concerned about the radionuclides and I don't know who would responsible for that. But this 2003 doesn't list Photon (phonetic) 90, but it is listed in prior contaminants.

We have found that somebody in Photon 90 replaces calcium in the bones and is being found in children's baby teeth. My concern is that these are averages. If you have a high peak area of radionuclides and a fetus is exposed it could cause a problem. So I am very concerned about these radionuclides and I don't know who can answer that question.

The other thing is personal to me. Our house backs on Massachusetts Avenue and 9 to 16 dump

30-21-GC

trucks coming down a hill where the truck drivers really enjoy those air brakes, it's -- and we measured it at one point. It's much more than 90 decibels, which is affecting human health.

MR. JACOBUS: Let me quick respond to this calcium question. EPA requires literally hundreds of contaminates or potential contaminants come to be monitored. I will get -- if I can get your name, I can get you an exact answer. But chrondium (phonetic) is one of those elements that is not expected to be present and is -- I think it is monitored once every two or three years.

So will take a water sample to comply with the monitoring requirements for those contaminants which may not be required we monitor every year. That may be why it's not in that report.

[redacted]: It's not -- I think Photon 90, which is caused by -- it's a manmade product.

MR. JACOBUS: Yes. It's fallout, radioactive --

[redacted]: At nuclear plants.

MR. JACOBUS: But the -- the reason it may not be on the report because there is an intermittent

monitoring requirement for it. I will be happy to address that water quality question with you.

MR. CAMPBELL: I move to the other side of the room.

[redacted]: I'm [redacted]. I'm Chair of NECPB. The aqueduct is located within our commission's district.

30-22-DA, GA

I will be joining [redacted] from Palisades tomorrow and echoing what he said to you tonight, that the pipeline is the only viable alternative.

And I will leave that part of my statement there.

Also, I want you to know that I cannot help but feel that you were absolutely rocketing toward trucking. Today I received notice that there will be a meeting to upgrade Little Falls Road. This community has worked for years to get bus traffic transferred to Little Falls Road off of Loughboro. Suddenly, we are going to have that dream come true. What we are seeing here is the industrialization of the Washington Aqueduct.

And if, in fact, we are paying for the alternative, let's choose the one that works, piping to Blue Plains. Thank you.

1 [redacted]: My name is [redacted]
2 [redacted]. I'm are president of Quality Life Committee. I
3 was born walking distance from this thing you want to
4 build. I live and I'm building a house 100 yards from
5 it. Every day I walk in the woods adjacent to this
6 building. An industrial building does not belong in our
7 residential neighborhood. It just doesn't belong here.

30-23-BB

8 You people have got to figure out something else. It
9 doesn't work. What are you thinking about? Moving the
10 building isn't going to help. Shifting something isn't
11 going to help. We want you out of our neighborhood. Get
12 the message. Thank you. What the hell were you thinking
13 about?
14 [redacted]: I'm going to try not to waste
15 a question here like I did last time asking if there is
16 anybody from the EPA in the room and are they going to
17 stick around this time until the end of the meeting.

30-24-NA

18 I've seen a lot of politicians, local and civic leaders,
19 who have walked out already for whatever reason. Maybe
20 its organization, Maybe it's too much detail. Maybe
21 it's too long a questions. So I'm going to be real short
22 and sweet.
23 About three weeks ago the Washington Post

1 had an article about two problems that may impact the
2 reservoir and may impact communities around it, both in
3 Washington and in Maryland. The article discusses
4 discovery of perchlorate in the groundwater and the
5 aqueduct, settling bonds, and in the basement of Sibley
6 Hospital. It also discussed the Spring Valley munitions
7 problem and the likelihood of ordnance buried in
8 Dalecarlia Woods near the District line.
9 You're conceding now, it seems, that the
10 monofill is not a preferred option because of the Spring
11 Valley cleanup problems. We really haven't discussed it
12 much tonight, but we did at length when you all made, as
13 you called, some disclosures that last time around.

30-25-KB, FE

14 So my basic question is does the Army
15 Corps , whether here at the Aqueduct or in the issue
16 process have any plan for monitoring, measuring, or
17 figuring out what kind of groundwater issues you have
18 around the reservoir and Maryland and Virginia.
19 The second question is how do you keep the
20 Maryland citizens of what is going on during any
21 potential remediation, because now that you have said you
22 have to take the alternative off the table because of
23 bomb cleanup potentially, you better be talking to these

Maryland folks about bomb cleanup near the District line behind Westmoreland Hills. Are you going to have a new RAB or is this going to be the continuing vehicle to tell the Maryland folks what you all have been very kindly telling the Washington folks, what's going on with this mess around the reservoir.

Thank you.

MR. JACOBUS: Thank you Scott. The -- I am here -- I am employed by the Army Corps of Engineers. I am here representing the Washington Aqueduct.

The issues concerning the Spring Valley -- actually the American University Experiment Station, formerly a defense site which people generally refer to as Spring Valley, are the responsibility of the Department of the Army and the Baltimore District of the Corps of Engineers as the agent of for that.

We are keeping in touch with what they do, but the notification of the remediation would be the responsibility of the Spring Valley office. So that's -- we would certainly watch that with great interest because we need to protect the water supply.

We are involved in groundwater investigation to understand the affects of any

groundwater movement that might affect the Washington Aqueduct. But that job would continue to be done by the Baltimore District of the Corps of Engineers.

There were two side comments here made and the Scott didn't exactly say it. But tomorrow there are two D.C. Council hearings, one at 2:00 at the Wilson Building. It's a joint hearing by the -- Ms. Allen's Human Services Committee and Schwartz' Public Works and Environment Committee on sort of a follow on to a hearing several months ago on Spring Valley. And I know that the Army Corps of Engineers, Colonial Davis, a Baltimore engineer, along with the Department of Health, Dr. Lane -- I'm sorry --

Jim, help me out here? Are you still here.

UNIDENTIFIED SPEAKER: Dr. Payne.

MR. JACOBUS: Yeah, excuse me. Dr. Payne and Geraldine E. Hirsch, I believe is the EPA witness there.

So that is an opportunity. And I don't know who the public witnesses are, but that is an opportunity to hear more in the public forum about Spring Valley. So the Corps of Engineers will do.

Alma Gates indicated she will make a statement. She is talking.

If some of you have an interest, Ms. Schwartz has a hearing following -- it's scheduled at 4:00, the other one on the schedule for 2:00 -- to discuss the progress so far in the Washington Aqueduct's issues with the solvents in the EIS. So those two areas are tomorrow.

The scheduling is good that I have the opportunity of hearing you tonight as I go down to discuss those issues with her tomorrow.

UNIDENTIFIED SPEAKER: Okay. I kind of said the same thing last time, but nobody seems to remember. Because I just want to know like -- and I guess this is kind of a suggestion, too, that the pipeline also like affects people. And I just think -- gosh, I know you published, put up on the web about the truck routes, and so I think it would probably be like a good option, especially for Palisades citizens along the right-of-way, which may be one of the, like, things, used to build the pipeline. And if you would try to like come up with some alternative pipelines routes that -- I mean, I don't know if Blue Plains is the only place you would

30-26-DA

be -- you could like pipe it to or if there is other places, but it would just be useful to everybody if you could try to like come up with an alternative like pipe routes, like put up an amount of those so people could see where -- like who is that going to impact. Because like -- I mean I guess everybody from the PCA left, but that's an issue in the Palisades area especially.

MR. CAMPBELL: I will weigh in a little bit on the issue of the pipeline. Constructing using directional drilling a pipeline 11 or 12 miles long is a major construction effort and even horizontal drilling requires staging areas every 4,000 feet or so to essentially drill the hole and push the pipe through. Those staging areas are of some significant size. Depending on where you are, they have impacts associated with them.

So all of this will be described in the EIS. But the directional drilling process, meaning going underground rather than cutting a trench, is a huge undertaking with some significant impacts associated with that process.

I'll go to you.

UNIDENTIFIED SPEAKER: I just want to

1 understand the nature of the material we're talking
2 about. I think a long detailed answer to the question I
3 asked, you would probably give it to me.

30-27-KC

4 If I were to put this material around my
5 tomato plants, would this kill the tomato plants,
6 increase, the yield, or have no effect at all? And, if
7 the tomatoes still grew, would they be safe to eat?
8 MR. JACOBUS: I don't know the answer.
9 We have three versions of this. We've got wet, dry, and
10 liquid. I am not a botanist. They would absolutely not
11 do anything to endanger the safety of the tomato,
12 absolutely not.
13 However, whether it would -- whether it
14 would in some way enhance the growth of it -- what it
15 basically is a material that is high aluminum, with iron,
16 and the rest of it is just the river silt.
17 So it is referred to by the Maryland
18 Department of Agriculture when it permit -- for instance,
19 the Maryland Central Water Authority and I believe also
20 the Potomac plant, or WSSC, they ship this material to
21 farmlands in upstate Maryland in some cases. And they
22 are allowed to do that under permits issued by the
23 Department of Agriculture where it is determined as a

soil amendment. It is not top soil in that pure form and it' s not a fertilizer. But it is a safe material. It is also used -- in some cases materials have been used in Southern Virginia as a basis for growing the pine forests and so those trees seem to do well.

So it is -- I would have absolutely no hesitation whatsoever in eating the tomato. But I couldn't tell you whether your tomato crop would be enhanced by the use of it or if perhaps the tomato didn't react well to those particular elements.

But, in a general sense, it would not be harmful.

UNIDENTIFIED SPEAKER: I have what I think are going to be two quick and then a request. The first of the questions is with respect to the sound. I think the slide indicated that the sound would rise by about 60 decibels within five feet of the plant, but at a distance it would be .4. My question is what is the distance? Because people have their homes just a couple hundred feet away from this plant. And that is a question, I think, of immense significance.

30-27-KC

MR. CAMPBELL: That is the distance. Our background noise monitoring, both at certain dead and

quiet periods of the evening and noisy periods, were at the Winward and Ward Place and various other places close to the facility there.

UNIDENTIFIED SPEAKER: Was this done when it was wooded or not -- when the leaves were out or not?

MR. CAMPBELL: I'm not sure of the answer to that.

UNIDENTIFIED SPEAKER: Because that would make a significant difference.

30-29-KC

My second question is have you done a toxicity study and whether if, in fact -- I assume it's not your hope or plan that there actually be dust, or significant dust generated. But, if there is significant dust that is generated from this plant that drifts into the neighborhood, into the playground, into people's homes, have you actually commissioned and done a toxicity study that shows breathing this on a daily basis for one's lifetime whether it will actually have an affect on his health?

MR. CAMPBELL: We are doing a toxicity analysis. It has begun. It is not finished yet. And we will give you those results. We have taken samples, something like here, and we've applied to those what is

called a toxic characteristic leaching procedure or TCLP, which is the common analysis look at a variety of parameters as applied to regularity criteria for land disposal of these materials.

That will tell us some of these hazardous threshold levels and from that we can draw those conclusions. Do you want to add to that, Tom?

MR. JACOBUS: I just want to clarify one thing. It's a little unfair to say that we're going to do what you may be talking about, which is a true toxicity study of inhalation of dust. I don't think that is -- that is not something we're currently planning to do because we don't anticipate dust to be significant and reflective of a material that at its driest has 70 percent water content.

So our focus for the toxicity analysis is much more along the lines of the regulatory requirements for land application or for typical concerns with this type of physical processing.

UNIDENTIFIED SPEAKER: When you say you don't anticipate there will be dust, what -- I mean, other than perhaps the common sense that the material -- have you done more than actually study that?

MR. JACOBUS: This material was actually brought back from the Potomac plant of WSSC that actually dropped out of their hopper today. And what we have up here is quite moist. And if it were built such that this material drops into a hopper and into a bed of a truck out of the hopper, then the truck left the facility, the truck would be covered with a tarp and so with the moisture here, there would be no dust from the truck, from the load of the trucks, and there would be no fugitive dust due to the structure of the plant itself.

So I don't think in this case dust is -- dust that is involved with the processing of these solids would ever be an issue in your neighborhood. It's an issue of material that is quite moist.

30-30-FE, MB

UNIDENTIFIED SPEAKER: My comment is that -- I know that at least the Brookmont Civic Association, I know that -- I believe that other groups, have requested additional time for comment and input of this process before you move put together the Environmental Impact Statement.

And, as [redacted] indicated before, there are documents that we think are critical that we haven't seen. I don't know whose fault it is or how this

1 came about, but this is an issue that has just come to
2 our attention in the past several weeks. It is an issue
3 that profoundly affects our lives, the quality of our
4 lives, potentially our home values. There seem to be
5 health issues.
6 I don't think I have ever stood up at a
7 public meeting of this sort and made a comment before.
8 But it is an issue that I feel passionate about. I know
9 other people feel incredibly passionate about and it's of
10 enormous importance to them.
11 And think that the matter bodes of a
12 better process and fairer process and a process that we
13 all feel much better about at the end of the day, is if
14 we actually felt that we had the time to look at the
15 documents, to study them, to give you comments that we
16 really felt were informed comments. We obviously don't
17 have an enormous budget or, you know, highly qualified
18 scientists to look at this. But we are doing the best we
19 can and we're doing it under a time pressure where we
20 feel as that we really have not been given an adequate
21 opportunity to study the background material that you
22 studied in making your recommendations to the citizens
23 here that you're making and the analysis that has gone on

for years and years without our involvement.

My request to you would be to give us the opportunity to give you comments that are meaningful so at the end of the day we all feel as though at least we had the opportunity to work in a fair fashion.

MR. JACOBUS: Let me make one comment. I don't know I will be able to actually answer this question.

The purpose of our meeting tonight and our ongoing collaboration with you electronically or mail or whatever, the comment -- the period that we extended was to receive ideas for new alternatives to be studied. And, as we specified here tonight, we listed a few of the major ones.

But we received 100. And now we've go to in the time going forward analyze those, screen them, and possibly add some of those to our evaluation. We are not waiting for you to get the draft EIS in your hands and then put you in this time constraint that if you won't ask for it, the train is leaving the station.

You are certainly able and we welcome the opportunity for you to comment and give us your input. The only schedule point that we met this week is that we

1 believe, with the alternatives that we have evaluated,
2 with the ones you've come in, that we have a good basis
3 upon which to make a proper decision.
4 But you still have an opportunity, and an
5 ongoing opportunity, and we welcome you to comment on how
6 we perform the evaluation, the kind of things we should
7 be taking into consideration that as we come up with an
8 alternative will be -- you will have your opportunity to
9 help shape that.
10 So I see no difference between submitting
11 alternative number 102 for our consideration or giving us
12 a general, or even specific comment, as you did on the
13 quality of life and dust, the proximity, and those kind
14 of things. Those comments are still very much in the
15 open arena and will be through the public comment period
16 on the EIS. So the more comments you can give us now,
17 the better.

30-31-FE

18 UNIDENTIFIED SPEAKER: If I could just --
19 I'm confident that we will have other opportunities to
20 comment as things go forward, but I think it is our
21 perception, and I think it's a fair perception, that the
22 further one gets in the formal steps as it moves forward
23 with the actual promulgation of the EIS, the less likely

it is that our comments will actually be able to influence the processing.

We feel way behind now already. But we feel that if each formal step is taken without giving us this time to comment, that it makes it harder and harder to have influence on the process.

MR. JACOBUS: Thank you. And we're sitting here as tentative members of an organization here to serve the surrounding community and our direct customers who receive the water. And I can really speak from my own brain and my own point here, but I am listening and absorbing and considering in light of what we're doing and whatever we need to do, how to deal with all of these things.

So your comments are being received by me, and I'm sure by my colleagues here, in ways to develop -- will cause us to deal with them in the most responsible way possible to incorporate your ideas into a final outcome, the final outcome being this draft EIS statement.

So this is -- even though we're pretty much listening here and responding to your questions, there is a lot of a absorbing going on here and I just

1 want you to know that we come here with an open mind and
2 a sincere heart that we are involving ourselves in your
3 lives.
4 MR. CAMPBELL: It's up to you.

30-31-FB, BB

5 [redacted]: Thank you. My name is [redacted]
6 [redacted]. And I have been asked by 600 of my neighbors and
7 600 of your neighbors to let you know that we believe
8 that the draft Environmental Impact Statement should not
9 proceed at this point for the wrong reasons.
10 A 30-acre, 80-foot high waste dump on the
11 grounds of the Dalecarlia treatment plant along the
12 Dalecarlia Parkway, in the midst of several large
13 residential areas, is not a viable alternative for
14 health, safety, quality of life, and the financial
15 reasons.
16 The review of the proposed alternatives
17 has been shallow, show inadequate, and arbitrary. The
18 implementation time line is impractical. We want to have
19 a voice in this proceeding. And we ask that you reopen
20 the screening process to examine a wider range of
21 alternatives.
22 And I think these 600 signatures were
23 presented yesterday to you in our petition.

30-32-MB

1 And the second point I wanted to make is
2 that we here in Maryland, as you know, have made a
3 Freedom of Information Act request to the Corps that to
4 date has not -- we have not received the materials. And
5 we have been joined by our Maryland Congressional
6 delegation. Senator Sarbanes, Senator Mikulski, and
7 Congressman Van Hollen has joined us in our request for
8 the release of these documents that we need -- we feel we
9 need to be able to see and have time to review. We have
10 asked for 90 days, they have joined us in that request,
11 to be able to review these documents and in that time to
12 be able to engage in a true conversation about
13 alternatives and the screening process.
14 And only at that point would we feel it
15 would be -- we would be able to really engage in a
16 conversation. So I hope that you are going to release
17 the documents to us and to grant the request that our
18 Congressional delegation has made to you.
19 [redacted]: My name is [redacted]
20 and I live in the Overlook section of Westmoreland Hills,
21 Maryland.
22 Based on the presentation this evening, it
23 almost looks like you're only looking at one alternative

30-33-FB

1 now. Are you continuing to go forward with Environmental
2 Impact Statements on all three of those alternatives,
3 even though you say that there is no chance that Blue
4 Plains can take the material or that the dump cannot be
5 implemented within the time line required under what --
6 is it the Federal Facilities Compliance Act?
7 MR. CAMPBELL: The answer is yes.
8 [redacted]: So you are only looking --
9 you are turning in all three alternatives?
10 MR. CAMPBELL: Yes.

30-34-CA

11 [redacted]: Okay. So you're spending
12 taxpayer money to do a complete Environmental Impact
13 Statements on two alternatives that you are already
14 telling us are not viable?
15 But, be that as it may, let me go on to
16 the second part of that. And that is that if you can't
17 put the dump in place because of the weapons remediations
18 issues that prevent you from doing it within the Federal
19 Facility Compliance Act time lines of, what, 2009, what
20 is to prevent you from doing it 15 years from now? Let's
21 say you truck -- let's say you build your dewatering
22 complex and you truck for 10 years, can we get some
23 guarantee that you will not revive the dump option?

MR. JACOBUS: I'll be happy to talk about that. I know it's a small point. It's not exactly taxpayer money. We are completely funded a hundred percent by the sale of water to our customers.

Clearly, our engineering efforts, all of our salaries, equipment is paid for by the water rates. So it's clearly money by the rate payers of D.C. Water and Sewer, including Arlington County, and Falls Church that are paying for this because we're required to conduct this study.

The reason we are going to continue on with the complete assessment, the Environmental -- the draft Environmental Impact Statement will have a series of alternatives that are evaluated. Right now there are four, the no action alternative, the monofill, the processing facility for trucking at Dalecarlia, and the Blue Plains option.

We believe it is prudent to flesh out all of the impacts, because we've done a lot of the work, and have it all laid out in the document because it will provide a very good historical record for the future.

The outcome of our analysis eventually will be a document called the Record of Decision. The

draft Environmental Impact Statement will weigh out the alternatives. And what we talked about here is identifying that right now -- well, I'll just say that the monofill and the sewer cannot go forward as the preferred alternative amongst these four.

The preferred alternative now looks to be the Dalecarlia processing and trucking as things are developing. And we're bringing you into this because we want to not have any surprises in the draft EIS.

But to specifically go to the second part of your question, the assurance you have of not doing the monofill later is that the Record of Decision will be a singular action. It will say what the -- what the recommended action is.

If we were, 10, 5 years from now, to decide to -- to build a monofill, we would have to reopen an environmental assessment process under NEPA. We would have to have another series of meetings like this under the National Environmental Policy Act. The value that we might have at that time, if we ever thought that was a good idea, is we will have this data that brought us to this point.

So while I can give you no guarantee that

1 we will never go do it again, what you see -- what you
2 will see in the Record of Decision will be a singular
3 action and not a either/or or a little of this, a little
4 of that.
5 Does that answer that question adequately?
6 [redacted]: It does. And I guess I
7 would like to paint the scenario is that --
8 (Off the record.)
9 MR. CAMPBELL: Please, start again.
10 [redacted]: The scenario I would like to
11 paint right now is that you finish this process, you
12 build the dewatering complex, you select the trucking
13 option, and 10 years -- 10 years down the road you lose
14 the permit at whatever remote dumping site that you are
15 trucking these residuals to or your trucks hits a child
16 crossing the street and here is a big hoopla and then all
17 of the sudden are we looking at the dump again.

30-35-CA, GA

18 And I wonder if you will -- one can finish
19 the remediation, one hopes, of the munitions and the
20 poison gas and whatnot that is surrounding the reservoir
21 and in the woods, the Dalecarlia woods, where the dump
22 has been proposed to be.
23 MR. JACOBUS: As I said earlier at the

very beginning, and some people may have not been here, we specifically want to evaluate a local disposal option to avoid long distance trucking to see how that would play out under the Environmental Impact Statement process. At the time we started that we did not know that were would be a significant schedule problem with the munitions.

One of the things that will be very valuable to us is to see just what the viability of a local disposal option is in this neighborhood. And, on the face of it, I understand what that looks -- you know, why do you really want to build that mountain. I have also heard people say why do you really to build that building. I understand all of that.

As far as if a truck -- if we lose a permit, you know, as we get into solid waste disposal, we're going to have to be very active in looking at disposal sites. But we also looked at disposal sites that were not dumps, per se, but were beneficial use, like land applications for farm land, and have some beneficial reuse of the material.

We saw one of these items up here, maybe it would go into a manufacturing process and go to an

1 off-site cement location. That was a suggestion somebody
2 had. We had people form Leigh Hi Cement Company come out
3 and take a sample of the solids. We arranged for them to
4 do that. We they're looking at that.
5 But, if a truck were to hit a child, that
6 would be tragic and we would do everything in our
7 processes to have programs and contracts in place so that
8 never would happen. But, you know, the truck that is
9 delivering groceries to the Safeway could hit a child
10 too, but the Safeway would still -- still be in the
11 neighborhood.
12 [redacted]: Safeway can be sued.
13 MR. JACOBUS: Well, we just talked about
14 any negligent act on our part can be dealt with under the
15 Claims Act and then on from there. So we are not saying
16 with any special immunity that we do what we please.
17 We're here working with -- within the law and within the
18 public interest. So I respect your concern and we
19 certainly will work toward the very best safety that we
20 could achieve. Along -- I think there were 38,000 trucks
21 that left the reservoir dredging project over the two and
22 a half years. Safety and cleanliness was a major
23 concern. I know of only one fender-bender that occurred

down at MacArthur Boulevard. We can do very well and we would definitely put our minds to it.

MR. CAMPBELL: Thank you. You've used your two questions and that comments. I would like to defer to the other side. You can just go back and have at us again.

[redacted]: Thank you very much. My name is [redacted] and I'm with Sludge Stopper of Bethesda. I am not a scientist. I am not an engineer. I am not a politician. But I'm actual a citizen who is a friend of the neighborhood of the Capital Crescent Trail. And my training actually is in conflict management. And I have friend who live in the area who asked me to come because there is clearly a conflict here. You have a lot of very angry residents, very frustrated, very scared residents.

And I would like to note it's showing the process is not working particularly well and that people are not feeling as if they are being a part of the solution, even if the solutions are eventually going to be good. They are not a part of that themselves. That anger and that energy is being directed against the Army Corps of Engineers and other individuals rather than looking at solutions.

Well, the whole concept of looking at a process to get the end goal where everybody wins as much as possible with the net sum of gain is one of the things I was looking at. And I want to read to you and into the record the -- I especially want to thank Mr. Peterson and also other people from WASA and others who actually have been forthcoming with information. It's hard to find when you've go to go in and search for it. So I do want to thank you for at least given access, but it is a lot of work, too much work.

What I wanted to focus on in the first place is the 2.4 alternative screening process and criteria. And so that everyone understands what that is, it's the screening of alternatives. It is an approach commonly used as part of the NEPA, which is National Environmental Protection Act, to identify feasible alternatives and ensure a reasonable range of alternatives for detailed evaluation of the DEIS.

Because in this delta each previously or newly identified alternative was screened against predetermined criteria. The draft predetermined screening criteria was circulated for public review and comment during the scoping process before they were

applied to the alternatives.

And one of the issues that has come up consistently is essentially to whom were they given, when, where, and how was this part of the public information before any of the screen process occurred.

Because one of the issues you currently have here is that in order to be a reasonable range of alternatives, you are getting it from the criteria.

Well, you've already determined what the criteria are to determine the definition of what is reasonable and what is not reasonable.

What we hear tonight is that out of the 26 that were originally there, 23 of them were eliminated just because of those criteria. Three were left.

One of them was the monofill that had essentially been nixed because of other difficulties that are a part of that. The second one is going to -- the third one, actually, seen as Blue Plain where you would take it and you would pump it on down, but they all of the sudden have decided that we're going to be full, they're not able to do that and they have essentially nixed that as an option.

So what we have been hearing is that it is

1 essentially one alternative of all of the screening
2 criteria that had gone on previously that is being
3 evaluated, and that is to build this massive sludge
4 facility, a residuals thickening and dewatering plant, in
5 a residential neighborhood.
6 And that one and only option that is
7 currently looked at as the preferred would probably do
8 more good for people here not to consider a reasonable of
9 number of options, but simply here they have to look at
10 the fact is that option itself actually reasonable.
11 And I don't think it would be very hard to
12 ask how many people in this room actually think that
13 building this huge plant is the only alternative, is the
14 favored reasonable option for the problem, and the
15 problem is dumping the water in the Potomac, which is
16 getting it out of there, the dirt. It's a good thing.

30-36-BB

17 But if you could turn that around -- and
18 what I would like to do is see a show of hands, how many
19 people in this room think that building the massive
20 sludge factor in the middle of a residential neighborhood
21 is reasonable at all. Can I see a show of hands if you
22 think it's unreasonable?
23 We want it out of here.

The full concept is it's unreasonable to think that you're going to build this industrial facility in a residential neighborhood. But the vast majority of --

30-37-FE

The vast majority of what has occurred is the ways to build it in here, which direction to turn it and which -- how high it's going to be, which direction the sun and maybe the development of the roof, and all of that energy is going towards building an unreasonable alternative that the NEPA and the EIS essential take of consideration. So that's a fundamental flaw in the process. We're looking at the, quote, flawed criteria which were not -- I would ask for a show of hands, who here was a part of the criteria selection to which they then made all of the evaluations and screened them?

There are a lot of very smart people here who are very active, and very involved. This means a lot to them. But not one person was involved in the most critical component of this, and that was the criteria by which all other things are being met.

And of them I would add to this, and there were essentially 70 criteria that were there. And I won't actually go through them all. But the fifth one,

does not produce an undue economic hardship on Washington Aqueduct customers. That seems to have left out what about the local residents who are going to have to have this thing built in their back yard or have the trucks run by their house.

And there is one that also seemed to be missing from the bottom of the page that's saying how about a criteria that says the production -- or the solution does not destroy the very character and quality of the impacted communities. To me that would seem like a very, very fair criteria in which to start the screening process and not look at it afterwards.

So, with these issues in hand, we have another fundamental issue where we go and say, okay, is this the best alternative, is it the preferred alternative.

I just heard a comment saying that you are continuing to look at other alternatives and that's very -- that's very good. But so far the preferred one is now preferred by whom? If we took a roll call vote tonight, I don't think you would find the majority of the people in this room to find that the preferred alternative.

On the chair in the back there, there's a

1 little survey, a Sludge Stoppers survey, for anyone who
2 would like to fill it out. It has, A, building a sludge
3 factory and dumping it in the landfill and, D, is
4 building a sludge factory and pumping it out in trucks,
5 and, C, building the sludge factory and pumping it out to
6 Blue Plains.

30-38-BB

7 What Sludge Stoppers also would like to do
8 as add at least a category D in there, and that is do not
9 building the sludge factory in Bethesda, build it in a
10 nonresidential industrial area that is intended to be
11 used for this type of purpose.
12 And I would also add an E, which is an
13 other. And the reason I added that is if there -- as you
14 hard from the Palisades representative, [redacted], there
15 are a lot of very smart people in this area. There are a
16 lot of very powerful people in this area. They can get
17 things done.
18 And having the only solution being one of
19 these three or the generic fourth, and I would say that
20 actually Sludge Stoppers actually deposited 72 of those
21 options for alternatives.
22 I have spent a significant amount of time
23 as a layman looking at these alternatives. I have talked

1 with quite a few individuals, including the former head
2 of the federal EPA's water management program. And he
3 was absolutely -- he's retired, of course, now. He said

30-38-DB, DD, DF

4 there is absolutely no reason why they can't build pipes
5 in pipes, et cetera.
6 And these are, to the best of my
7 understanding, very, very large pipes, like eight feet
8 tall. Or the interceptor is nine feet around. In some
9 other areas it's even -- the length of it, it's even
10 taller than that. So these are huge pipes to which you
11 would have to put potentially a six-inch pipe on the
12 inside of it to be able to pump it.
13 And there are alternatives. Whether it's
14 going out, say, to Corbalis. There is multiple ways to
15 get it over to Virginia. It goes up. It goes down.
16 There are ways to getting it up to WSSC, up and down.
17 It's not just where to put it.
18 But I think this thing needs to be put in

30-39-DD, KB

19 a bigger context. homeland security, redundancy. Let's
20 say somebody blows up Little Falls that's in front of it.
21 Where is all of the waste going to come from? Virginia?
22 What happens to WSSC in the north of the Potomac. Having
23 redundancy built in as part of a plan is a smart plan.

It may cost a little bit more, but it's intelligent and it's necessary because the infrastructure of our water and sewer is so critical for our daily lives. Without, life would tend to come to a craw.

But solutions do exist. They need to be looked at and they need to be done with cooperative interest. We have a Representative, we have Delegates, we have Senators who are willing to help with this process so it's not the federal government turning its back. It's not the state government turning it's back. We do have people who are on the Montgomery County Council, who are part of the D.C. Water Support. They are also on the Metropolitan Washington Council of Governments. This does look at huge regional issues, the entire Potomac basin watershed and finds out what is the best solution for an entire region, not just looking at the best way to turn a building in a small parcel as an option, not looking at, well, do we build it and dewater it, take the stuff out, or do we just thicken it here in this big build and dump it elsewhere. Those are relatively narrow scope issues.

I strongly believe, and this was been the feedback I received from the vast majority of every

1 person I've talked to, and it has been hundreds now, that
2 these options need to be brought. There is no one here
3 who wants to shut it down. I would say that almost
4 everyone here wants a cleaner Potomac. They all have
5 very good solutions. They have -- or rather good intent.
6 They want the best. This is not one of those.
7 Taking your concepts, whether it is Blue
8 Plains -- you could do a lot of other things. You could
9 put IJAs in the ground, interjurisdictional agreements.

30-40-DA, DB, DD, DF

10 Blue Plains that it had so much access
11 capacity that they were able to sell their excess
12 capacity to WSSC, to FCWA, Fairfax. They had all of this
13 capacity and they were taking huge amount of that excess
14 out of the D.C. WASA area. And now they don't have
15 capacity to handle the residuals from their own water?
16 There is an issue there that needs to be addressed. That
17 is bureaucracy as a result. It's a matter of looking at
18 what is -- what can be done and who makes the decisions,
19 who makes the choices.
20 Every single thing I've been coming to,
21 and I can tell you, I could stand here for hours. I have
22 much more information about it. I'm certainly willing to
23 help facilitate this, and whether it's Sludge Stoppers,

it's MAT.com or we just started this evening SludgeStoppers.com. We're going to start creating an environment that shares as much information as possible.

There are people who would like to see the engineering drawings, that would like to go see the forced mains, would like to see the routes going to and from the station. Redirect it up to Rock Creek pumping station and run it across the D Street conduit along the backside when the Georgetown conduit is suffering from a CSO, a sewer overflow.

Blue Plains has a $1.2 billion budget for capital improvements they've looked at in their long-term studies that involved building huge storage tanks, about 15 million gallons for them right there in Georgetown. We don't flush into the Potomac hundreds of millions of gallons a day from the Dalecarlia facility. It's only a few hundred million gallons a year, is the best of my understanding.

Taking those flush rates and timing them when there are not big storms, putting them in the same reservoirs, you could some existing pipes, new pipes, et cetera, to push it somewhere and pump it out and dewater it, have chambers where you could have certain amounts of

residuals, certain amounts of fresh water, or raw water, sometimes sewer water.

It's all big stuff. It's expensive. I takes a lot of planning. And there are experts out there. I'm not one of them. I am just somebody who did my homework and took a quick look. There are experts out there who can solve these. It's a big project. I don't want to be rough, but you're the Army Corps of Engineers. You guys do amazing things, big huge projects. I don't think that this is something beyond the capabilities of the Army Corps of Engineers to find a solution that does not involve putting an industrial massive sludge factory in the middle of a residential area.

Now, for my second comment. I'm not alone in this and I thank you for not only patience, but we did submit 72 alternatives. We have a book. We're willing to share this with anyone else who is willing to do so.

But, more importantly, Sludge Stoppers decided that this was not something for a few people to worry about their own property values, it was a bigger issues. We went out on the streets and here are almost 800 signatures on our own, in addition to the ones that came from Westmoreland concerned neighbors, in addition

to the ones that came from Brookmont. There are a lot of people to whom this makes a significant impact in their life.

So we will present these to you. It's the same signatures and the same solutions that we already passed on to the representatives.

Thank you.

30-41-FA, FB

[redacted]: I'm [redacted], the citizen of Westmoreland Hills. And I'm fairly new to the conversation, but I had a couple of questions.

One is, what is your schedule and are you -- have you already issued an RFP or a contract to design and build the facility?

MR. JACOBUS: The answer is no. The way we lay out the schedule is we acquire the services competitively. And a CH2M Hill is the architect/engineer. They are initially under contract to us for the services to produce the NEPA documentation. Subsequent to that, we have an option to employ them for the design. We probably will exercise that option. And then once the -- and then they would continue on with construction services during construction. The actual construction of whatever it is we construct would be a

separate contract that would go out according to the plans and specifications in the design.

The general concept of NEPA is to do -- come up with the Record of Decision before you begin an process that would not otherwise have been done should some other decisions be made, conversation of resources and time and intent and all of that.

So the schedule -- the current schedule to meet our Federal Facilities Compliance Agreement, looking backwards is to have all basins in operation by December of 2009. There is one basin in the new regime by March of 2008. And then we estimate a generic construction schedule for whatever is being constructed of about 36 months and then a design schedule of about 18 months.

Working backwards from that, there are some interior milestones in the Federal Facilities Compliance Agreement that say that by the end -- by the 20th of December either an EIS or a document that lays out the alternatives which is tantamount to a draft EIS, but not maybe that document itself, is to be given to the EPA. And then by June of -- Am I right here, Frank?

By June of 2005, a final document to EPA indicating what we are going to do.

So we are toward the end of the environmental assessment process with your input. We have -- sitting in either meetings like this or in other ways, we would expect the draft EIS to be available to the public. We start the public -- the formal public review period of that document in mid-January and then go on from there. I don't bore you with those numbers. Is that somewhat responsive.

30-40-FA

[redacted]: Well, it does. But what it sounds like, and maybe my math is bad, is that you have got to start designing in the next six months in order to get operational by 2008, if you're looking at 36 months of construction.

MR. JACOBUS: But your math is very good. And the -- that is why we are trying to be as public in this, to engage you, to let you know what we are thinking as we are arriving at these alternatives, to get feedback from you, because we are on a short time line to meet that compliance schedule.

So, if we -- our expectation is that we are going to work long, hard hours between now and next -- in the middle of December to process the viability of these 100 alternatives and to -- if any of those emerge

as full-fledged alternatives, we add it into the original four in the EIS, that all of that we have to be done and be ready to be presented to the public in January.

So there is two months for us that are going to be extraordinarily busy as we evaluate all of this. If we are successful in moving through the public comment period, there's a 45-day comment period. We'll have a formal public hearing during that comment period. And we arrive at a Record of Decision on May, mid-May to June, we would then be ready to begin the design.

We are trying to keep schedule. We are schedule driven, but we're also outcome orientated and process oriented.

30-41-FE

UNIDENTIFIED SPEAKER: Mr. Jacobus, is that the answer, then, to the question that I asked earlier, are you going to release the documents and give us 90 days to review them? Have you just answered my question?

MR. JACOBUS: We were trying to -- I am going to answer that question. I respect the people at the microphones, but we're going to come forward to the microphone and take our turn tonight.

UNIDENTIFIED SPEAKER: You didn't answer

1 my question when I was at the microphone.

2 UNIDENTIFIED SPEAKER: He answered the

3 question.

4 MR. JACOBUS: The question is -- I

5 answered the question early one. Perhaps you weren't

6 here.

7 But the question is we have taken all of

8 the documents that we believe are responsive to the

9 request and delivered them to the Freedom of Information

10 Office at the Baltimore District and they are processing

11 them for release to the public.

12 I have not acted on -- have taken no --

13 have not made any decision to take any action on an

14 extension of a period of time.

15 So, the two-part question and the two-part

16 answer is, yes, the documents have been delivered to

17 counsel for release. If any of those are held back I

18 would view that as a determine made appropriately under

19 the law by counsel. And the second part is I don't have

20 an answer to that question tonight.

30-42-MA

21 [redacted]: Can I ask one more schedule

22 question? What exact jurisdiction does EPA have? I

23 mean, aside from the requirement that you do the

1 Environmental Impact Statement and file it, do they have
2 any jurisdictional authority over this process at all?
3 MR. JACOBUS: That's a very interesting
4 question. And the water protection division, EPA would
5 have comment to ensure the efficacy of the solution as it
6 would affect the ongoing water treatment issue as is
7 required under the Clean Water Act. So that's one area.
8 Under the terms of whether this meets our
9 permit under the Clean Water Act, they would a view of
10 that. As to whether it has properly been evaluated under
11 NEPA, we do file the final Environmental Impact Statement
12 with an EPA office. Am I right on that, Jim?
13 So Region III, our regulator, is involved
14 in two of those three ways. Headquarters EPA is involved
15 in the third.
16 It is -- I want you to know, there is no
17 secret here, we are -- we are the permittee. We are
18 bound to deliver safe drinking water, to meet all of the
19 regulations. This is part of the regulation process that
20 we're going through right now.
21 The individuals who have issued us this
22 permit, EPA Division III, we have met with them. We met
23 with them about four weeks ago now, shortly after the

previous meeting, to give them an update on what we were doing and some of the public sentiment. I don't believe there is anyone here from EPA here tonight, but they are very much aware of where we are in this process and they are involved in those ways.

And we have no latitude as the permittee to deviate from the permit or the compliance agreement, but EPA is very much observing what is going on. Let me just say that.

[redacted]: Thank you very much.

MR. CAMPBELL: We're on the other side of the room now.

UNIDENTIFIED SPEAKER: I am addressing my comments to the audience. My name is [redacted] (inaudible).

A month ago I went to a meeting of the Brookmont Civil League and much to my shock and horror, I learned about this project. I didn't know anything about it before. Kindly a neighbor of mine gave me a piece of paper and disk. And I had no idea what I was walking into. Since then, I have not had a full night's sleep. This is an absolute nightmare. I want to talk to you about my emotions, just as [redacted], one of our other

neighbors did, who is always walking around Brookmont, who loves Brookmont.

I live in Paradise. I lived in Brookmont for 30 years. I love it there. I plan to die there and I don't plan to die there of infixiation. I have asthma. I have 25 percent breathing left.

We can be told a lot of things. Oh, this is safe, don't worry about it. It's not. It's really awful. And I think we really have to listen to what [redacted] said and [redacted].

First of all, I committed myself in that meeting to grassroots organizing. We have over 800 signatures, which we have given to you. And we are all opposed to this plant. And we didn't know about it.

I went to a meeting on Sunday of a civil association, a group of neighbors. They didn't know about this. I went to the polls and I was there all day long at the polls. Luckily, a neighbor brought me some sun tan lotion and a hat, because I was going to fry there on that beautiful election day.

People don't know about this. And, if they do, they know very little about it. We just got a letter five days ago telling us about this, the immediate

neighbors. We need -- for sure we need those 90 days. We're not scientists. We don't know about this. You folks have been planning it for nine years. You've got elaborate plans down to the last little window and light switch. You know -- and we're being told this is going to happen and a lot of our questions are, oh, well, you know, what about this alternative.

30-43-BB

We cannot have this in a residential area. It can't be in our area or any other residential area. And this has to be a fair process. And we at Sludge Stoppers want you to come to us with your comments. We want to all work together to make sure that this thing stops. This is an unfair process. And we really need everybody's help in this. Thank you.

MR. CAMPBELL: We'll turn over here.

30-44-FB

[redacted]: I am [redacted]. I live in Brookmont.

Just a few -- I have worked with EIS statements before and it takes a long time to prepare an EIS.

And are you telling us that you're going to evaluate these alternatives in a thorough way between now and January 15th?

1 UNIDENTIFIED SPEAKER: December 10th.

2 [redacted]: December 10th, whenever it

3 is. I feel like the train has left the station.

30-45-MC

4 The second concern I have is the

5 contractor that is preparing it, because I just heard you

6 say that if the decision goes a certain way they get a

7 lot of work out of it. That sounds like a conflict of

8 interest.

9 MR. JACOBUS: No, not at all. Not at all.

10 It is an architect/engineering contract. We, the agency,

11 hires them to make recommendations. We make the

12 recommendation as to what is going to go forward. That

13 goes forward then gets designed. So there is no -- there

14 is no conflict of interest here at all. They're not

15 making any decision. They are our agent to do the

16 analysis and prepare the reports and then we evaluate it

17 and move forward.

18 There has been -- you know, a lot of work

19 has gone on in evaluating the four alternatives that were

20 presented in May. And at that meeting of the -- where we

21 had this room. I think it was the 28th of May, where we

22 described the three alternatives plus the no action

23 alternative. Ever since then, there has been staff work,

an enormous amount of work has been going on to do all of the areas, the environmental areas, the 16 areas that were described in that. That work has been going on.

When we agreed and said, look, we think the public -- there is value in getting more alternatives from the public, we have received now over the last several weeks probably about 100 ideas. Those are ready to be screened. Only a few of those, and I don't know how many, if any, possibly a couple, will pass through the screening process and then be added to the EIS. So there is a lot of work to be done, but the EIS will not contain a 100 alternatives. It contains four right now and it may contain two, maybe three more. And I believe they are based on what we have seen of the alternatives so far and what they are -- the similarities or nuances. And there is a lot of information we already have that could be rolled into that analysis.

So I think it's possible -- it's a very -- it's a very ambitious schedule. You're very right about that.

MR. CAMPBELL: Let's turn over here.

UNIDENTIFIED SPEAKER: I was indirect earlier, but I'll be clear. The Western Avenue Citizen's

30-46-JA, EA

1 Association is working on the other alternatives never
2 mentioned here.
3 By the way, Mr. Jacobus, in a moment of
4 honesty, and I appreciate it, several years ago you told
5 us the real answer. Sorry, you did. And I appreciate
6 it. And you said it twice. We can continue to put the
7 residue into the water. We can. That is a very viable
8 alternative because you, yourself, told me that you told
9 the EPA years ago that you believed that that sludge or
10 that residue had no real measurable real negative affect
11 on the water. You remember telling us that? You did in
12 a meeting several times.
13 MR. JACOBUS: Oh, I -- you know, I want to
14 make sure that there are -- I don't have fleeting moments
15 of honesty and dishonesty.
16 The point is, sir, that we proposed a
17 permit to EPA that would require that the material to go
18 to the river. We did toxicity, we did intake analysis
19 that was presented to the EPA. EPA, in their decision,
20 decided that under the provisions of the Clean Water Act
21 that it does not concern itself with whether or not there
22 are impacts to the river or no impacts to the river, they
23 exercise the best available technology under the Clean

1 Water Act to require us.

2 So, from a public perception point of

3 view, we believe that if there is a better way to put the

4 material back into the river -- it is an unsightly event

5 when it occurs. Even though we could sit here and argue

6 scientifically that there is no toxic or forensic effect

7 on the river, we have moved beyond that based on EPA's

8 authority to regulate under the Clean Water Act.

9 So I do not have the ability at this point

10 to do what you suggest. But you are absolutely correct

11 that at the time the permit was issued we were making a

12 case to the EPA that the toxic effects of the material on

13 the river were not the concern that should have the

14 permit issues against putting solids in the river.

15 UNIDENTIFIED SPEAKER: Thank you. Now, he

16 said it again. He was honest.

17 You see, many of you might not know it,

18 several years ago we went through this. And, honestly, I

19 didn't mean to implicate your honesty or undermine it.

20 But there is no reason why you cannot put

21 the effluent back into the water. There is no reason.

22 In fact, you all told me in a meeting the last time we

23 were here that their modeling is hypothetical, that

30-46-JA

they're not really sure of the effects, but so they -- the requirement it's under, what is this, best technology?

MR. JACOBUS: Best available technology.

UNIDENTIFIED SPEAKER: They're making us do this under the best available technology provision, but it means they don't really know if there is any negative affect whatsoever from the effluent flowing into the water.

There is no reason to do any of this, I'm sorry to tell you. There is absolutely no reason to do any of this.

Now, our organization is going to work to stop the EPA from pressuring these people. But I'm telling you, we've been in this for a long time. Sally and I, 20 of us, have been at this at the Western Avenue Civil Association for a long time. There is no reason to do this. This is all EPA-driven, built under the hypothetical modeling. They don't really know the effect. And it may affect more. They said our hypothetical modeling showed it could do X.

30-47-MA

And these people were kind enough and generous enough to tell them there's no problem with this

at all. So all of this is a really much to do at nothing. We should fight, and we're going to -- we're to try and fight the EPA to stop them from forcing the Army of Corps of Engineers from carrying this out. I hope some of you will help us. Thank you.

30-47-MC

[redacted]: I would like to revisit an issue that was raised by an attorney in our neighborhood, David Robinson, with regard to the potential conflict of interest.

Initially, what I said -- I'm sorry if I'm back for a second bite off of the apple. But what I said is the engineering feasibility study, which your firm produced, Mr. Campbell, basically produced information that was slanted to undercut the possibility of having this material and residuals dealt with in Blue Plains and basically supported a trucking option.

Let me give you an example. The report that you produced suggested that there is a 515 percent increase in the amount of residuals produced in times of high turbidity in the river. That 515 percent basically precluded the -- or slowed down the possibility of Blue Plains to use -- to accept that material because it basically fouled up their digesters. You put that in

your report.

When you then studied the creation -- the volume creation of materials at Dalecarlia, your trucking estimates weren't 515 more on days of high turbidity. They were 412 percent. You estimated that between 8, on average day, and 33 on a maximum day, truckloads would have to be carried out of there.

If you used the same factor, which is 515 percent, the actual truckloads would go up to 42. That's a misrepresentation, unless you have a scientific reason to suggest otherwise. In other words, what we have is not eight trucks a day going past Sibley Hospital, a nursing home, and school crossing, we actually could have on busy days about 80 to 82 or 84 trucks passing the same facility each time on a round trip, 42 out and 42 back.

So I think these materials were actually -- these suggestions were actually contained in our response. And I think it does bear on the potential conflict of interest if you're suggesting a plant at one place and not at another, then you are basically lining up a contract to serve as a consultant contractor for the construction. I think that really does bear a little bit of investigation. I'm not accusing you of any

illegality, by any means. I think these things could quite possibly be legal. I think it really does sort of raise the question of at least a perceived conflict of interest. Thanks.

MR. CAMPBELL: I'm going to ask several people to address that.

MS. GAMBY: Can I speak.

MR. CAMPBELL: Sure.

MS. GAMBY: Mr. O'Meara, I am Patty Gamby with the Washington Aqueduct. I'm the project manager on this job and I just wanted to address your concern about the conflict of interest, as well as a statement that was made earlier about going back to maybe the Whitman and Requardt report and using that.

I am the person who approves their invoices. And I can tell you that it sure would have been a whole lot easier to take that report off the -- off the shelf and start from there. It would have been a lot cheaper and a lot easier.

But we made a commitment to go back and start from ground one and hire a really good architect/engineer to start from the beginning and re-evaluate everything. So that is kind of backwards from

the way that --

[redacted]: Well, in all due respect, and I do respect -- and I respect Mr. Jacobus. He only goes to places where he knows that. And I don't think he doesn't have it here.

MR. JACOBUS: Will I see you tomorrow at 4:00?

[redacted]: What I'm trying to suggest is that the numbers that were developed in the initial report are basically substantiated and reinforced in the second report.

The first report, as I mentioned when I spoke first, put this train on the tracks and basically said we're going to do a plant at Dalecarlia to solve this problem because it's low cost. Mr. Jacobus has a constituency that he has to respond to to get them cheap water, at the best price, and to deal with that concern on their part.

We have a concern that basically isn't the same. We have -- and let's be quite frank, we're not the constituents of the water plant. And we understand that. But what we're saying is that if the first study basically got this thing going, the second study most

1 certainly, in the particulars -- they referred to the
2 first report as sort of a seminal document. And it
3 supporting the findings of the first document. It basic
4 -- and then from that point, the second contractor -- the
5 second consultant then made a consultant to the
6 construction project, it does have the appearance of
7 conflict of interest. I think you really should
8 investigate it.

30-48-MC

9 MS. GAMBY: Well, as far as that goes, at
10 this point in time, and everybody knows that we're
11 evaluating four alternatives. The fourth alternative is
12 no action. And right now with our NPES permit, our
13 Federal Facilities Compliance Agreement, no action is not
14 an alternative. I mean, I know there is a lot of talk --
15 and I just turned to your --
16 But at this point in time there are four
17 alternatives and no action is not an alternative.
18 [redacted]: But what we've heard tonight
19 quite clearly is you have one alternative, which is
20 basically building this facility and trucking the
21 materials out.
22 MS. GAMBY: But just follow my thought for
23 a minute.

[redacted]: Sure.

MS. GAMBY: We have four alternatives. No action at this point in time is not an alternative. So any of the other three alternatives require engineering and design. So the fact that these people are studying the feasibility in a project that has some things that has to be done, the conflict of interest isn't there.

And, in fact, the sewer alternative right now, which from the meetings that were presented earlier, infeasible, I think the one point our $160 million -- is it the current price tag on the sewer?

30-48-AB

[redacted]: Actually, could we see how that figure was derived? We've talked to --

MS. GAMBY: Yeah.

[redacted]: -- in Toyko and Germany and Paris and Omaha and Indianapolis and Albuquerque that say it isn't that big a deal, that it could be put in at a reasonable cost. We just have an assertion at this point. We would like to see some numbers. We haven't thus far.

MS. GAMBY: And we're going to provide that. As somebody mentioned earlier, we have -- contrary to some statements made earlier, we had many

conversations, we had many contacts with WASA, as well as meeting, conversations, and whatnot. That is a very well documented and they're all in the documents.

I just wanted to make a point as far as the conflict of interest goes. We have a problem that needs to be solved. And we are doing a study phase. There is a design phase. We have a timetable and that is what we're moving towards. And we're trying to find the best alternative and we have a good engineer who is working with us to get us through the process.

[redacted]: You know, I didn't mean to suggest that it was illegal. I think it ought to be looked at a little bit closer. That's all I was suggesting. And I suggest, Mr. Jacobus, I think earlier -- we want to work -- there was a discussion from another representative from another civic league. We want to work on a solution that involve legislative consideration, a way to open the process up a bit more than it has been since September 6th. And I would appreciate your help on that. That's all.

MR. CAMPBELL: I would like us to also answer you. You identified what you considered to be a discrepancy that is in the case of the potential

predisposition of one alternative over another. I would like Glenn to talk about those generation rates and address that part of your question.

MR. PALEN: I am going to try to answer the question, at least part of it I know I can.

You seem to be implying that the only thing we looked at for the Blue Plains option was key production rates of residuals that would impact them. That's not what we did. We looked at both peak rates, which are very important at the Blue Plains facility, because both in the average capacity and the wet weather capacity, on both the flow and the solid side, and we also looked at the average conditions.

In our multiple discussions with them, it was very clear that neither one of those production rates, or anything even close to the average production rate, when we refer to the 11-year average number, which is -- take average weather conditions over an 11-year period, which was our beta study, and average those. As far as less -- much lower number than I would say on a typical average. That can't even process half of that amount of residuals into the front end of their plant.

We went through a series of conversations

to get to that understanding.

We didn't even stop there. Then we said, okay, what is another way to get this stuff to Blue Plains and handle it. The other way we could think of was building a dedicated pipeline that goes around the liquid treatment process to the back end, if you will, part of Blue Plains and process the residuals in the solid form. Initially, we thought about jointly with WASA or separately with WASA, but essentially move the dewatering operation to the WASA facility.

If we were only adopting what was in the Whitman, Requardt report, as you suggest, we wouldn't need to go through any of that stuff I just described. It's just not what happened.

We did a much more thorough evaluation than that.

[redacted]: Can I --

MR. CAMPBELL: It's his turn.

UNIDENTIFIED SPEAKER: I have been waiting.

[redacted]: I know, but I'm going to be super quick. I promise you.

This is the thing that happens here

tonight, folks, watch this. We'll hear this instead of the monofill. Anything about the monofill? We just spent 10 minutes on a really tough, loaded, pointed detailed question. Other people here want to speak. I was trying to follow up on some other very important points, the first one of which is John Finney, close friend of Mr. Jacobus, respected him dearly, very much, recently died, but he put in the Northwest Current the quote that this is making a rouse to get back to the river. I just wanted to point that out.

One of the things in the military we are trained to go to the highest level possible with all of these processes. These are smart, good people up here. But they made one little mistake about being as smart as they could be. They said they haven't looked at dust. I had a neighbor, Dr. Darcella come up here. I was very surprised to see her. She said in my neighborhood we wondered about the dust from the monofill. You remember that lady asking that question? She said we worried about toxins, dust, wind, prevailing winds, that stuff tries out in the monofill. It can't always be wet. I don't think it's covered in plastic. It is 30 acres in circumference or area. It is disingenuous to say we

never looked at dust.

This is complex stuff, folks. The old expression is, I'm going to read it to you, their either not working hard enough or they're working harder than you think and they're not telling you everything. These are good people, but let's keep the bar up here.

[redacted]: I have a question. My name is [redacted]. I've lived in Brookmont forever.

30-49-BB

And my first question is, have you guy actually put on hiking boots, jeans, and walked in all of these neighborhoods or have you been doing this from your office desks? Have you seen Little Falls Creek and how pretty it is back there and Dalecarlia? And you guys need to keep that into consideration. Like, where Pat Living lives and you stick a big building up there, it's going to destroy that whole valley. And I'm not quite sure what your impact is on Little Falls. I think that is a major tributary. Has there ever been a study on that? It's a pretty major tributary. And you're building so close to it -- I know that normal house -- home builders can't build very close to a major tributary like that. And it sounds like you're planning to build

fairly close.

MR. CAMPBELL: I'm not sure exactly. We are looking at --

[redacted]: Little Falls is a major tributary and I go there --

(The audience talks over each other.)

[redacted]: All right. My second question is, if you didn't have all of this space, what would you do? Let's start there. If you didn't have all of this space, what would you do? If you didn't have 35 acres, what would your number one alternative be?

UNIDENTIFIED SPEAKER: A very good question.

MR. JACOBUS: If you go back to 1860 and what the holdings were and -- I have tried to maintain the integrity of the safe, reliable, and cost-effective operation of the water treatment plant, not only here, but at McMillan. My predecessors and the military leadership in Baltimore and the leadership of the Corps of Engineers, and of our customers, we have been very, very careful to make any decisions to give up property.

We have anticipated future treatment operations. We can't be clairvoyant, but --

[redacted]: That's not my question.

MR. JACOBUS: But the reason --

[redacted]: I'm saying --

MR. JACOBUS: I can't answer that question because we do have that property. We are dealing in the real world, where we are right now. I do not believe we would be in this situation if we didn't have the property because we wouldn't be here.

We are where we are and we have to come up with a real solution given the assets that are available to us. I understand the effects of any construction on neighbors. I understand the interest in building a pipeline. I really do understand that.

But we are trying to evaluate our options based on the reality of what is available to us. And we have, to get to this point, been very careful to retain property because we envisioned increasing water treatment processes.

And so this is a -- both here and at McMillan we are very much in an urban environment. It may not be unique, but we are certainly unusual to be so urbanized. And one of the things at this point -- and McMillan also is we are trying to present a good visual

appearance in the neighborhood. You know, the campus-like look at Dalecarlia, the, whatever you want to call it, you know, Trevor Wahoo, Jr. landscape design at McMillan. We are very appreciative of that. And long-range, we don't want to screw that up.

So I've already said here, we are where we are and we're trying to move forward as best we can. And I do appreciate and understand what you're saying.

[redacted]: All right. Okay. Two other things.

30-50-BA, BB

If you don't build a -- if you don't have a landfill and you take the buildings that you're going to put in -- I mean, you're on a bluff above the Potomac. Can you bury these things on the property and spread them out? You've got 35 acres and you're in an area near Brookmont. Can you spread those buildings out in the bluff somewhere? You've got that hill at Sibley. And you can essentially mine that hill and bury those buildings so we don't have to see them.

I mean, you've got a lot of acreage, you need to bury those things.

MR. CAMPBELL: There have been a variety of conversations that have taken place in recent weeks

with people concerned about the visual aspects of this. And part of it includes dropping them down and what is the engineering feasibility of that. I think we need to look at that and we need to look at disbursal of facilities. And that has to be weighed against the operational issues related to the facilities, having them closer together to minimize sounds and minimize other kinds of impacts.

So I think all of that will be looked at.

[redacted]: Instead of having them all lumped over in Brookmont, if you don't have the landfill can you stick them -- can you put them discretely around the property so that Westmoreland doesn't have to look at them and Brookmont and Palisades don't have to look at them? Thank yo.

UNIDENTIFIED SPEAKER: How about Spring Valley?

[redacted]: Spring Valley. I'm sorry about that. Spring Valley. I forgot.

30-51-DA

And the last thing, I hear that -- I was sitting here and I hear it has been recommended, it has been proposed, that that old trolley way has got a really nice empty flat space that you could stick a pipe and

1 take it all the way down to Key Bridge. You know, and I
2 don't see what the problem is in building a trench pipe
3 all the way down to Key Bridge. We've got a pretty empty
4 trolley right-of-way there and that will save you a
5 couple of miles of boring and tunneling. I mean, it goes
6 right up to the plant, so --
7 MR. CAMPBELL: We'll take that as an
8 alternative idea. Thank you.
9 Yes, sir.

30-53-AA

10 UNIDENTIFIED SPEAKER: I haven't read the
11 report. In the screening criteria, one of them that was
12 mentioned was the cost to the D.C. rate payers for water.
13 Do these different criteria have weights and how much
14 weight is given to the costs? Because we value our
15 environmental benefits locally differently than we value
16 what D.C. rate payers -- I live in Maryland, in
17 Brookmont.
18 But how does the cost side of this
19 calculation play into some of the alternatives before it,
20 like switching intakes to avoid the sediment coming out
21 of the Potomac? Could cost millions of dollars.
22 Pipeline could cost millions of dollars.
23 Clearly, there are technically feasible

best technology options that would avoid the sludge plant, could eliminate the silt going into your water treatment that may have other environmental benefits by improving fish flow in the Potomac.

Valuing these benefits is hard to do. Measuring the cost is fairly easy to do for a good engineering -- design/engineering firm. How is the cost weight at least in the screening process to get into the full environmental impact assessment?

MR. CAMPBELL: At the screening process, cost was a factor in some of the -- some of the alternatives that were not carried forward. It was not the only factor. And so none of the alternatives that were sort of discontinued for detailed evaluation in the EIS were eliminated based on cost. It was only one of a broad range of considerations that really dealt with the purpose and need of the project. And so that's -- your answer, was cost weighted higher or lower, it was a factor, but it was not an -- it did not screen solely on that purpose any of those alternatives.

And, Tom, if you want to talk about generally the posture of cost as it relates to -- cost as a factor as we look at some of the other alternatives,

and maybe some of the 72 or up to 100, that we have received recently. Some of them deal with wholesale change in the water treatment, complete changes at the water treatment plant. There is a cost factor associated with that that goes really beyond kind of the parameters of this project that will fall into play. Do you want to address some of that stuff preliminary, Tom, or do you want to just leave it there?

MR. JACOBUS: I don't really have anything, I don't think, substantively to add.

UNIDENTIFIED SPEAKER: Give him the microphone, please.

MR. JACOBUS: I don't really have a substantive answer to that. There is no absolute number, a certain number, but a number like -- any of the -- if the feasible alternatives, when we -- if you are going to evaluate them on a cost basis, we would like to -- to maybe stay within 30 percent of the value of feasible alternatives, if they weren't screened out for some other reason.

So we looked and thought about that a lot. The actual premise -- Let's say we have a construction cost -- if we were to do the -- even the monofill or the

processing plant at Dalecarlia, both the monofill and the trucking would have the plant. Let's say that would be perhaps a -- let's just say, a $60 million construction cost, which is ball park.

In our budgets that we put out to our customers, even though we haven't designed it, we still have to project some kind of number. And so we know that the -- that the solutions in the $60 million range can be accomplished to do this.

Now, if we go -- and our customers know that. And they've thought about that in their budget.

If we were to say, based on all of this input, that for a good and legitimate reason that the only available alternative is $200 million, then that becomes a very interesting discussion and we aren't at that point. But for us to come up with a -- let's say one of the alternatives would be to -- to change the water treatment process and don't use -- and don't use coagulants and that kind of thing, the internal cost of doing that would be so large to change the water treatment process that exists just to accomplish the solids, we would -- that would come out as a technology issue and also a cost issue. And we look harder at the

technological issues.

So I don't think I'm really answering your question. But we have factored in a potential number and then are evaluating things in relation to something that we know would work. But this whole NEPA process is to look at the feasible against the human and natural environmental issues. And you have addressed a lot of important human and some environmental issues here tonight.

UNIDENTIFIED SPEAKER: Well, I would hope in the screening process you take some of those other environmental, human costs that we're raising here and factor it into your $60 million least cost solution to move it up to where other solutions can be considered in the feasibility study and make it through to the full EIS, you know, some of these additional 100, maybe even some of the 23 that were rejected.

MR. JACOBUS: All right, thank you.

[redacted]: My name is [redacted] and I live in the Westmoreland Hills area.

You have indicated that you are continuing to look at the monofill as one of your EIS options and that you turned over to your legal counsel the documents

in response to the Freedom of Information Act request.

30-53-MB

My question -- my first question is: Have you undertaken any studies or have access to studies undertaken by other agencies or know of other studies of the impact of clear-cutting at least 30 acres of trees and the impact also on the shrubs, herbs, animals, plants, and birds that live in that area? Have there been any such studies and have you turned them over in that FOIA request to legal counsel? And, if not, would you be willing to make them public or give us information as to who has those studies?

MR. CAMPBELL: I don't believe there are any studies that exist right now on the impact of clear-cutting those 30 acres on sort of all of those biological resources.

The Environmental Impact Statement is looking at that in detailed and has detailed all of the flora and fauna and then talks about what the impact associated with clear-cutting that is, not only clear-cutting those resources, but then what the impact of having a clear-cut area is in terms of other some kind of continued, contiguous woodland area. Forming -- you know, having a chain of woodland areas.

And so there are a number of things that are looked at. All of those are included, because that's a significant impact. That will be outlined. And there are pages and pages on the flora and fauna of that area based on the research that we've done there. It's just that will come in the draft EIS.

30-54-BB, BE

[redacted]: My related question is that the Westmoreland Citizens Association is negotiating with a botanist and ecologist who would undertake the inventory of particularly the trees and shrubs and plants and looking for specimen trees and identifying those, but that there are two conditions attached to this person's willingness to undertake the study. One, that you grant legal access to the property to do the inventory and, second, that you identify the boundaries of where the approximate, at least, 30 acres would be so that this person would know the area for the study. Would you be willing to provide legal access and to relatively promptly identify those areas so this study could be undertaken by experts representing the concerned citizens who reside in the area?

MR. JACOBUS: I would appreciate it if as soon as you can you would send me a letter so I have

something to act on. I don't want to react affirmatively or negatively right here in person. But, if you give us a request, we will promptly consider that and act on it in a way that we think is responsible for what our responsibilities are in moving the project forward.

The marking of the area, that's easy. But whether or not it's appropriate, for lots of reasons -- And I'm not trying to say no to this. I'm not trying to -- but, if you give me a request, you send me a letter requesting that a certain person have access for a certain purpose, we will certainly respond to that very promptly.

[redacted]: But if don't have any information until the EIS report comes out on the 20th, it's almost kind of -- the 20th of December --

MR. JACOBUS: What are you looking -- what are you looking for?

[redacted]: We're trying to better understand since we don't have -- you haven't provided it because we're being told you don't have it now and you're just doing it now.

MR. JACOBUS: Well, wait, that's the whole point of this analysis, is to look at the impacts. And,

as soon as we get them, our disclosure of all of this information is the EIS document itself.

So there are no studies that we are relying on. We are conducting research and evaluations as we speak and that will be presented in the EIS document. Since the EIS has not been evaluated by us as the preparer, there is nothing to release. But that will be exactly released.

If, in the meantime, you're interested in having an independent look at the area, we will evaluate whether that can be done. And I'm open to the idea, but I don't want to give you a definitive answer as we stand here tonight.

[redacted]: Without asking you to commit yourself, sir, is there anything in principle that would be against, if we're willing to spend our own money to have an expert -- to be cooperative with that person so that the information can be obtained?

MR. JACOBUS: I don't know. I think that -- the fundamental principle is, is that as the owner/operator of the facility, not only the Corps of Engineers, but anybody -- that any facility that is operating under a permit with certain restrictions and

1 certain processes, you know, it's kind of like asking
2 General Motors to come in and do a survey of their
3 assembly line to look for improvements. I don't know
4 what they would do. I don't know what we would do.
5 This is -- it's a very interesting
6 question. I know you are interested in the flora and the
7 fauna.

30-54-BB

8 [redacted]: Not only that, the effect
9 on the air pollution of removing these trees.
10 MR. JACOBUS: Well, part of this -- part
11 of this is the system is set up that we have the
12 responsibility to state the action that we intend to take
13 and make an evaluation of the action.
14 What you're asking to do, I believe, is to
15 have a parallel study so that we go forward with
16 potentially dueling studies. Ours is not complete.
17 You're asking for access so you can do an independent
18 parallel study, if I'm hearing you correctly. And I'm
19 not sure what our reaction to that is. But I would like
20 to think about that and respond to your formally if you
21 would formally ask me.
22 [redacted]: Thank you.
23 MR. CAMPBELL: Is there anybody over here?

Or we'll just go straight through this line.

[redacted]: My name is [redacted] I'm from Brookmont.

You know, I really admire your getting us together. It's like New England town meeting. That was very good. But now I'm wondering what happened. You have all of this information. You have these people giving out these wonderful ideas.

30-55-FE

Did you ever consider about having a working committee work parallel with you, representatives from these neighborhoods, on doing this project? Are you open to that? Are you going to do that?

MR. CAMPBELL: I think that is going back to the drawing board.

We have received an awful lot of input, starting in May, particularly heightened in August and September and October and now that constitutes a lot of input. There is a period now where we need to take a look at all of the ideas that we received that Mike described in detail.

There also is an interest in working with people about the residuals processing facility, if we get that kind of appointment, I think that's kind of

30-56-CA

cooperation we're envisioning right now.

[redacted]: My name is [redacted] and I live in Brookmont.

The potential site for the dewatering facility is currently part or all a landfill. And I was wondering if part of your site studies are going to be to determine what is in that landfill.

MR. CAMPBELL: I would imagine that's part of the design process. Glenn, do you want talk about building on fill material?

MR. PALEN: As I understand, the material that is piled there is the Metro construction excavation material.

[redacted]: No, it's captured sand from your facility, at least as far as you can dig down by hand.

MR. PALEN: Sand, filters?

[redacted]: Uh-huh.

MR. PALEN: Again, that would be a pretty clean material.

[redacted]: No, no. As it stands -- All I know is it's not the natural grade and it's an artificial site that you're going to have to spend money to create

foundations and footing for an industrial facility, they're going to be costly.

I believe the question more is what's in the fill. Are we going to ever found out or is that something that is proprietary and we don't get to find out about it?

MR. PALEN: No, I don't think it's proprietary. There have been some soil boring done in the past as part of the previous design --

[redacted]: For the geotechnical stuff.

MR. PALEN: Yes.

[redacted]: I assume that you did that.

MR. PALEN: More of those will be done in the figure as we design it. That would be my current take on what we would do, not knowing any other reason to investigate what is under there, not knowing every reason why it would be a problem.

[redacted]: Well, I would raise the question that not knowing is sufficient reason to find out because you're in my backyard and I would like to know what you've got buried back there before you build a plant on top of it.

MR. PALEN: I think it certainly would be

discovered, what was there.

[redacted]: I guess I'm formally asking you --

MR. PALEN: Okay.

[redacted]: -- to explore that. This is not -- it's not a rhetorical question. I'm not looking to debate with you. I know there is a fill. I don't know what's in it and you don't know what is in it. I would like to be a formal request. It's an easy thing to do. And you have to do it. You know, you aren't going to spend $60 million to put a building on top of something you don't know about.

MR. PALEN: My only question about it would be when would we do it, that's all.

Now, there is no reason to suspect there's an issue with the fill. It many or may not normally be done as part of an EIS versus part of a preliminary design.

[redacted]: It's just that if you do uncover it later on, it screws because it will stop the whole project. So you would need to have it done. As a good consultant, you would have to advise your client to do it now.

[redacted]: Okay.

UNIDENTIFIED SPEAKER: I want to respond to your answer to me. See, the way I look at it is we have the authority, the (inaudible) the authority and therefore you represent us. And what I'm saying is that we need to be represented in the decision that you make about this whole issue and we're not being.

30-57-FE

You are taking ideas from this room and you're going to go back and think about them. But I don't see us actively engaged in creative problem-solving with you on an equal level. I think that is what needs to be done. This neighborhood needs to be part of your decision-making process. I don't feel that.

MR. CAMPBELL: Well, then, let's take that as a good suggestion.

UNIDENTIFIED SPEAKER: So you could get people -- you could get names from here who would be happy to meet with you and continue this process.

MR. CAMPBELL: This is the path that we envisioned.

UNIDENTIFIED SPEAKER: No. No, but it's a path that we envisioned.

MR. CAMPBELL: Thank you for that comment.

[redacted]: I just want to say some, a follow up on your point. You peaked my interest about the old discussions. And, as the gentlemen said here, it's a town meeting. And I'm a lot more settled down and I apologize if I was coming strong earlier.

But, Mr. Jacobus, I'll toss it back to you here. It seems the issue with the water treatment process this spring that drew so much unfortunate publicity and everything. My water rates went up. I had to do all sorts of stuff with my water. And my wife is a doctor, freshly married with me. She is really concerned about water.

The issue was phosphates, I believe, going into the river and hurting down riparian, lower riparian, water interests. So we switched to a chloramine process. And then that caused a problem with lead corrosion.

Now, we're going to go, I believe, to an organic phosphate type solution in my neighborhood, on my street, by the way, over in Abermerle.

30-58-KA, KC

The question on that, back affecting this gentleman is what if a phosphate -- or can you foresee phosphates or anything like that being a problem down the road if you do have to go back to just stowing it in the

river and then you have to withdraw from stowing it in the river down the road?

I'm just tossing this up as how -- you all know how complicated it is. I'm not ruining their day at all. But that had all of us --

MR. JACOBUS: You're never a pest. The phosphate addition to work on corrosion control happens after the water has been purified. And the solids that we're dealing with here are taken out before the -- any corrosion control treatment. So there is no relationship.

The phosphate issue is at the wastewater treatment plant. And the addition of the phosphate into the drinking water causes a different kind of a problem, increased costs of the wastewater treatment plants both in Virginia and D.C. as a consequence of our corrosion control.

But, as far as any solvents that would be returned to the river in some future concept, the phosphate issue is after that. It would have no effect.

[redacted]: Good answer. Thanks.

[redacted]: I promise this will be much short. In the beginning I actually was going to ask a

1 question when couched in the middle of the concept of the
2 criteria. We've heard several times now you'll go back
3 and re-evaluate this.

30-59-FE

4 Would you be able to answer a little more
5 direct to the point about what criteria is going to be
6 used, how this criteria were originally determined,
7 whether you followed the requirements for public input
8 into determining those original criteria before you re-
9 evaluate all of the existing -- the new criteria and 23
10 original?
11 MR. CAMPBELL: Let me see if I can get
12 them all straight. The same criteria that were used to
13 screen the 26 alternatives are going to be the criteria
14 that are used to look at all of the other idea,
15 alternatives and options that have come forward that Mike
16 detailed. So that's the first answer.
17 The second answer is where did those --
18 the question is where did those criteria come from. And
19 those criteria were essentially the technical boundaries
20 that the Aqueduct used to allow it to say of all of the
21 ideas which ones will allow us to move forward and meet
22 the purpose and the need for this project. So that is
23 primarily where it went.

And so those were essentially threshold criteria, recognizing that past that any alternative would have a range of other impacts. And I know there is a lot of concern about that. And so it doesn't say there are no impacts after the screening. There are lots of impacts. But, essentially, an alternative could meet the purpose and the need for the project and then move into a detailed analysis for the range of human and environmental and economic and socioeconomic types of impacts. So that's --

And then the third part of your question was public process. And those criteria were identified and put forth as part of the scoping meeting and those were put forth on the web page very shortly after the scoping meeting.

And so those have been a part of the dialogue since the start.

[redacted]: Was it public input and is that public input process available for review?

MR. CAMPBELL: Of the screening criteria, yes, that's correct.

[redacted]: Was it recent for this round or was it a previous study when these criteria were

created?

MR. CAMPBELL: It was for this study.

UNIDENTIFIED SPEAKER: Is a transcript available for that meeting?

MR. CAMPBELL: Yes, that's on the web page, there's a summary of the meeting.

UNIDENTIFIED SPEAKER: A transcript.

MR. CAMPBELL: There is a summary of the meeting. And the way it worked was it was an open-house format and if people wanted to go and give comments to our recorder, they could do that. And there are a handful of them. We actually summarized those in the summary to make it a little easier to read. If you want the actual words, we're happy to add those.

UNIDENTIFIED SPEAKER: Yes.

MR. CAMPBELL: That's fine. Those aren't posted.

MR. PETERSON: We're going to post them.

MR. CAMPBELL: Okay. Mike has just said they're going to post those.

[redacted]: [redacted] from Brookmont.

This evening I've heard two interesting

30-60-EB, MA

1 ideas which seem to me to be a low impact to the
2 environment. One was to change the treatment process.
3 And you said that it would increase the cost from 60
4 million to $200 million, which is a lot of money, but how
5 many million consumers are there that that would be
6 spread over. So I think that alternative needs to be
7 elevated to one of the two or three that you're seriously
8 considering.
9 The other idea was is it possible to put
10 it back in the river and does that involve EPA rethinking
11 what they think is important. And I think that that is
12 -- that goes to whether you look at the government as a
13 unitary whole or whether you are a separate entity and
14 you have to do whatever EPA tells you to do. But it
15 seems that part of the environmental consideration
16 process is to get all of the agencies that are involved
17 making a unified decision about what makes sense
18 environmentally. So you need to get EPA to look at its
19 decision again.
20 MR. CAMPBELL: I'll answer that in reverse
21 order.
22 The EPA decision to issue the permit that
23 we're operating under was something we went into at

length at our meeting on September 28th. The answer is, no, we can't really reverse it.

The other answer is that EPA consider all of these factors. They went through a very lengthy public involvement process on trying to make the decision of whether to stay in the river or whether to get out of the river and what are all of the other agency considerations in that, what are all of the other things to balance. That was their process, not the Aqueduct's process.

At the last meeting we had a Fact Sheet that EPA used to summarize that whole decision-making through process. That was very well considered. We have that available. And I don't know if that has been posted on our web page or not.

MR. PETERSON: It's on the EPA web page.

MR. CAMPBELL: It's on the EPA web page. It went into their logic for that process.

Your other idea about changing the treatment technology is something that we're going to have to address and provide some information on in sort of further rounds of the alternatives analysis that will kind of get rolled up into the EIS.

30-61-FB, FE

1 UNIDENTIFIED SPEAKER: Yes, I wanted to
2 speak for a moment about this screening criteria. My
3 understanding is when you're developing an Environmental
4 Impact Statement that the screening criteria is supposed
5 to be looking at the environmental impact of what you're
6 doing. But, in fact, your screening criteria is -- has
7 all kinds of things involved in it. And we have been
8 asking since we first found out about this project back
9 in July if we could have something to say about the
10 screening criteria. And, if you're saying that our
11 opportunity to comment on the screening criteria was the
12 meeting where Mr. Jacobus stood on the balcony and yelled
13 down at everybody, I don't think that was what anyone
14 thought was our opportunity to --
15 MR. CAMPBELL: That's not what we're
16 saying.
17 UNIDENTIFIED SPEAKER: Oh, what is the
18 meeting you're talking about?
19 MR. CAMPBELL: I was talking about the
20 January scoping meeting that was when we put forth the --
21 UNIDENTIFIED SPEAKER: Well, we
22 established at the last meeting here that the January
23 scoping meeting, no one knew about it, no one went to it,

nobody was notified about it. It wasn't -- it didn't meet the letter or the spirit of the National Environmental Policy Act requirements.

So, you know, for you to allege that that was our opportunity to comment on the screening criteria, is really disingenuous because we have been asking for an opportunity to comment on the screening criteria and we have not been given that. And we do not believe that the January scoping meeting was a legal part of this whole process.

30-62-BB

[redacted]: I'm [redacted] from Bon Air Heights, the other [redacted], the short one.

Back to the question of alternatives, the mention was made that the 35 acres is there and it has been there for 100 years. That's also true of 40 acres that the monofill, that has been decided it can't be done. So things happen that nobody thinks about or knows about. And to think maybe from an engineering standpoint that somebody doesn't have in the back of their mind what do we do if we can't use that 35 acres, be it an earthquake faults or neighborhood uprisings, or what have you, there must be in somebody's mind somewhere another alternative to meet this 2009 deadline.

And, if there isn't, I would think that doesn't speak well for your internal processes.

MR. CAMPBELL: All of the alternatives that have been considered have been put forth to the public. And I don't know that it is productive to move into a hypothetical kind of question. Tom already answered that. That isn't the situation.

[redacted]: Well, the effort is to come up with alternatives and we're doing the best we can, being nonprofessionals at it and some people that are more professional than myself. But to think that they're aren't -- maybe the tunnel underneath -- you know, put a subway line from here to Blue Plains, a pipe -- I mean, there is obviously outrageous alternatives. But somebody somewhere must have thought of at your end at some point in time what happens if that 35 acres is not useable, such as the 40 acres isn't up here. I mean, it has already happened, so you can't say that it has not crossed somebody's mind and so forth. And maybe you just hope that it doesn't.

MR. JACOBUS: When the Dalecarlia plant was built in 1927 there were two basins and those basins -- the concept at that time was simply to put the stuff

in the river and it actually went to Little Falls Creek. And the discharge went through Little Falls Creek until 1990 when it was rerouted from those basins -- from the other basins down by the hydro station.

So the water plant at that location from 1927 has evolved. It is probably maxed out in terms of its demand, looking at the customer bases. It's quite a bit of capacity that we have. So, as we look 20, 30 years into the future, we don't think there is any possibility that we wouldn't be able to meet demand in our customer area.

But in 1976 when the Clean Water Act provisions were being looked at and all of that, the -- that was the first time that solids processing was formally looked at. And, at that time, our master planning took a look at what we have in facilities there. There were houses at one time. Those houses were removed. And that land is reserved for -- in our master planning for possible construction of augmented treatment facilities, like ozone facilities, or radioactive carbon.

The area that we are talking about is the facility to the rear of our facility, which is in front of you all, and has been in the master planning for 35

years, or 30 years or so as a potential location for solids treatment should the need for solids treatment be there.

So it's -- your hypothetical, gee, what if we didn't own that; well, we do own it. It has been integrated into the planning so that if there were to be a solids facility built that is where it would be built. So I think our planning has been quite good. And the actual execution of it, if we ever -- if we do that or use some other option -- you know, let's say we come up with an option that solves the solids problem in a permanent sort of way that didn't make use of that land, then that would cause us to revisit the master plan. I don't know. And then we would have to relook.

But we have been working under an assumption that if we build that facility at Dalecarlia that would be the first place to look to build. So I think that we're just carrying our planning through and whether we do it is the outcome of this evaluation process we're doing right now.

[redacted]: Okay.

UNIDENTIFIED SPEAKER: You know, I probably didn't phrase it in a question and that's why I

1 didn't get an answer. Why does the screening criteria
2 for an Environmental Impact Statement include things
3 other than true environmental impact?
4 MR. CAMPBELL: Well, there are -- you're
5 probably alluding to the schedule issues.
6 UNIDENTIFIED SPEAKER: No, I was -- Why
7 does the screening criteria for an Environmental Impact
8 Statement include more than things beyond the
9 environmental impact? I'm not speaking to the schedule.
10 I'm speaking to the screening criteria. You're doing the
11 screening for an Environmental Impact Statement. Why
12 does the screening criteria include more than
13 environmental issues?

30-63-NA

14 MR. CAMPBELL: First of all, an
15 Environmental Impact Statement looks at more than
16 environmental issues. That's a very broad term. We look
17 at social issues. We look at economic issues, as well.
18 So the screening criteria --
19 UNIDENTIFIED SPEAKER: In the
20 environmental impact development?
21 MR. CAMPBELL: Yes. And the screening
22 criteria are the threshold criteria to say before we go
23 into the Environmental Impact Statement, which is more

than just environmental, I just clarified that, what makes sense to carry this forward. And so we cannot carry forward an alternative that would not carry forward through all of the environmental impacts on it, but then it doesn't meet the needs for the operator of that project, it does not get them permit compliance by the end of 2009.

So that would be a futile effort. So that is the kind of thing we were trying to do. And then we look at other types of regulations too. We've look at, I believe, threatened and endangered species and other sorts of things that would preclude us from carrying an alternative forward to the extent we're able to identify it at that screening level.

So screening is not necessarily the environmental impact statement itself. The screening is how do we come up with -- how do we take -- move from many ideas into a set of alternatives that we can understand, that we can measure, that we can quantify, and that we can determine which one is the -- meets the best balance of tradeoffs.

So, hopefully, I'm answering that question. But that is the difference between a screening

process and then the detail analysis in the Environmental Impact Statement.

UNIDENTIFIED SPEAKER: All right, so your development of the Environmental Impact Statement is an analysis of the entire project, what is viable for you economically, what is viable for you in terms of a time schedule, that is your definition of the Environmental Impact Statement? Am I hearing you correctly?

MR. CAMPBELL: On the alternatives that are carried forward. And so we do not do an Environmental Impact Statement on all ideas. We craft them into a series of alternatives that allow us to understand the different kinds of impacts for different kinds of ideas. And that is why we have, you know, an idea that has trucking, an idea that has no -- two of them have no trucking. And then --

UNIDENTIFIED SPEAKER: So the ideas that are brought forward are not necessarily those that have the least environmental impact. They could be the ones that best meet the time schedule and that would be the proper screening in developing Environmental Impact Statement.

MR. CAMPBELL: In fact --

UNIDENTIFIED SPEAKER: Am I hearing you correctly?

MR. CAMPBELL: Yes. And, in fact, under NEPA you are not required -- you meaning any agency, is not required to necessarily take the alternative that has the least environmental impact. NEPA is a disclosure process to make sure everybody understands the full range of impacts. And then the agency that is offering that has to make that balance and those trade-offs.

UNIDENTIFIED SPEAKER: And is there a reason why the objectives that were published back in the Federal Register in January included as one of your objectives something about consideration of the stakeholders, but that is not part of the screening criteria?

MR. CAMPBELL: Those objectives were related to the study as a whole and I think they are being met tonight and in all of these other meetings. And so that list of four or five objectives, some of them were applicable in the screening process, but those are not directed by the screening. They are directed by the entire spectrum of the project.

UNIDENTIFIED SPEAKER: So what criteria do

you use to develop the screening if it's not the objectives which you published in the Federal Register?

MR. CAMPBELL: Criteria that I was hopefully trying to describe relate to meeting the purpose and the need for the project and not violating federal statutes that we are in place so they would be -- the alternatives would be capable of being implemented, that the purpose and needed would be able to be dealt with in the time frame required by the Federal Facilities Compliance Act. That is a general guideline.

And that is all described, I believe, in our description of proposed actions and alternatives that's posted on the web page as that rationale.

UNIDENTIFIED SPEAKER: And I think that the letters that we have been sending you, we feel that that violated NEPA. We don't think that you --

MR. CAMPBELL: I understand.

UNIDENTIFIED SPEAKER: We think that what you are doing is a very large setting when you're suppose to be developing an Environmental Impact Statement. You are doing some kind of a broad study, of which one would think you would do the Environmental Impact Statement and that would be part of the broader look that you might

1 have, but you're trying to do it all in one fell swoop.
2 Is that my understanding?
3 MR. CAMPBELL: I'm not sure I understand
4 your reference to one fell swoop. I understand what it
5 --
6 UNIDENTIFIED SPEAKER: The criteria
7 doesn't necessary either -- it does not include the
8 criteria that is in your objectives, but including other
9 things that aren't necessarily included in the
10 environmental impact.
11 MR. CAMPBELL: Like I said, the objectives
12 carry forward from the entire process. The screening
13 ended with just screening and picked based on screening,
14 we would have to look at a bunch of different things.
15 But we don't based on screening. Screening is just to
16 say what would work, what can we look at in greater
17 detail and environmental issues, social issues, and
18 economic issues are all brought into play.

30-64-FE

19 UNIDENTIFIED SPEAKER: And in the
20 feasibility study, you indicate that the draft pre-
21 determined screening criteria were circulated for public
22 review and comment during the scoping process before they
23 were applied to the alternatives. Can you tell me who,

when, where, and how? I mean, you know, I have never -- I don't know where this draft was circulated, to whom it was circulated, when it was circulated, how long it was circulated, who made the comments, where they made the comments, who knew about it.

MR. CAMPBELL: Well, the initial notice of intent is what starts the Environmental Impact Statement process. That was put in the Federal Register, as required. In addition, it was -- the notice was put in the Northwest Current and the Washington Post in January. In addition to that, we held a scoping meeting in the end of January. And we extended invitations to various agencies and citizens group that we basically had addresses on and had been involved with in the past on other projects. The invitation was sent to political agencies in D.C., Maryland, and Virginia, as well as regulatory agencies, like EPA, the Maryland Department of Environment, D.C. Department of Health. So that is -- and then also some different citizens associations. We didn't get all of the citizen's associations around us because basically we didn't have names and addresses.

But the -- the --

UNIDENTIFIED SPEAKER: I feel like we're

going over old ground. We have been over this before.

MR. CAMPBELL: You asked the question. I'm trying to fully answer it.

UNIDENTIFIED SPEAKER: Well, you're not saying anything other than what we have heard in the past.

MR. CAMPBELL: Well --

UNIDENTIFIED SPEAKER: We didn't have the address for the citizen's associations that are, you know, touching the Aqueduct because, I don't know.

MR. JACOBUS: Let me say that I think there really is a fundamental viewpoint and you have asserted that we are doing it incorrectly and we are operating under the conscious believe and conscious effort that we are doing it correctly.

UNIDENTIFIED SPEAKER: Right.

MR. JACOBUS: And so I don't think we're going to be able to resolve that here this evening.

UNIDENTIFIED SPEAKER: This is ground we've gone over before at the various meetings. You, you know, indicated you put it in the Washington Post. We suggested that it wasn't in our -- in our neighborhood newspaper and our neighborhood association and our

1 neighbor's associations, the Congressional delegation.
2 You're right, we have a major disagreement for which I
3 believe there no common ground, Mr. Jacobus. I think
4 you're right.
5 You indicated you published for public
6 comment and the public doesn't feel they had that
7 opportunity. So thank you.
8 MR. CAMPBELL: Thank you.

30-65-BB

9 MR. AARONSON: David Aaronson. I asked
10 before about the study that we want to do. We will write
11 that letter to you. But right after my comment somebody
12 had slipped me a note and said that you will not grant
13 the authority because you just beefed up your parameter,
14 you don't grant it to anybody, and that there may be
15 chemical munitions issues, there are liability concerns,
16 but that your policy, in fact, is that you haven't
17 granted access and that you are unlikely to.
18 I hope I'm incorrect, the person who
19 slipped me this note.
20 MR. JACOBUS: I don't want to even get
21 close to being out of line, but I told you what if you
22 will do, we will respond. I don't understand why you
23 would poll the audience and find out what the audience

things we would do.

[redacted]: No, it wasn't a poll, just somebody --

MR. JACOBUS: Well, Mr. Heuer has his ideas about what we will do.

[redacted]: You mentioned my name?

MR. JACOBUS: Well, I'm guessing.

[redacted]: No, no, no, wait a minute. I had didn't slip him nothing.

MR. JACOBUS: Okay. Then I apologize for that.

But the point is I asked you to please make a -- make a request to me so that I can properly respond. I don't know what the views are of the audience in this room of what they think I or somebody else will do. I am trying to be responsible.

And, if you would please ask me and tell me what your needs are, I will be happy to respond. What more can I say?

[redacted]: Mr. Jacobus, one thing, though, in the analysis process before you do screening criteria, then evaluation criteria, you go to facts and assumptions. You just made a bad assumption about me.

MR. JACOBUS: And I apologize. And I apologized, okay.

[redacted]: I'm not anybody's agent. I mean --

MR. JACOBUS: Okay.

[redacted]: And no one is my agent.

[redacted]: I would like to make a brief comment for the record about why we feel this is so important. And you have reinforced it.

30-65-BE, BB

Apparently, there has been no studies that have been done to date. And I think you would agree that the environmental impact of removing the trees and constructing a monofill is an essential part of this study. And, apparently, it is being undertaken now, the impact of removal of 30 acres of trees and construction impacts. By impacts, I mean impacts on having removed the trees, the birds, the plants, the birds, the mammals and the overall environmental impacts of that.

Now, if the study comes out, the draft report, and if you control access -- and let's assume for a good reason or another reason you decide to deny us, I hope that won't be the case. And we will write the letter in good faith.

That means that you control the only information about the environmental impact. And, if we don't have access to it, how can we intelligent comment on whatever is in this report? If it is an inadequate study, if it's an incomplete study, if it's an inaccurate study, the only way we can intelligent comment for the record under the NEPA process would be to have our expert do a survey to give us -- because -- to give us the ability to intelligently comment for the record.

But, since you control access, you also control the study. And we're under a very tight time period. If we don't have access through an expert, then we don't have the necessary tools to intelligent comment on the record, which is, I think, part of the stakeholders' right and what the NEPA process envisioned.

MR. JACOBUS: Well, certainly. The Environmental Impact Statement is our opportunity and our obligation to come to the public and tell you what we have found when we do our studies. And I am not sure for the -- I mean the study itself -- everything we have done and learned and are reporting on is inherent in itself. We are not really certain ourselves. We haven't completed it. It will be presented to you, the public,

as part of our environmental impact evaluation.

[redacted]: And then we have 30 days to comment with no ability of any expert to assist us --

MR. JACOBUS: Well --

[redacted]: -- on technical matters were you control all of the information and access to the property.

MR. JACOBUS: But why is that so surprising? It is our responsibility -- it is our responsibility --

[redacted]: Why is that so surprising?

MR. JACOBUS: It's not surprising. I want my answer heard on this. We have a responsibility to propose an option, get input, and then in the restriction of that action, let you know what the analysis is. We have to responsibility to run and improve and all of those things, that water treatment plant. And it is our responsibility to report to you honestly, straightforwardly, as clearly as we can what we intend to do.

And if there are -- I'm hearing that there are going to be six or seven parallel studies of what we're doing, that reason I say it's not surprising is the

whole idea of NEPA in this case is for the agency who is -- that is required to perform the action is required to do the analysis and turn that over to the public for their review in this process.

So I think we're doing exactly the right thing.

The fact that we don't have it done yet is because we don't have it done. As soon as it's done, we will present it.

So I -- whether or not we are going to say come on and take a look at some of the trees, you might be interested in this, I don't know how that answer now.

[redacted]: We had access to our own engineer, Mr. McLaughlin, and enabled us to come up with some suggestions of alternatives. Without that expert, we wouldn't have -- we would have been at a significant disadvantage.

Well, likewise, in looking at the impact of removal of these trees and the impact on the wild life there, the air pollution, and the quality of the environment, we won't have an opportunity for an expert unless you give us the access to do it.

And we need to have the opportunity to

30-66-FE

comment in an intelligent way on the findings of this study. So, without this type of expert, it would seem that there is no opportunity to engage in the NEPA process and give fair comments.

MR. CAMPBELL: I will address this. In the draft Environmental Impact Statement, what you're looking for will be in section 3 and it is a fairly lengthy discussion under the flora and fauna and also agency correspondence about the known records of, you know, potential and threatened and endangered species, whether this is a habitat for threatened and endangered species, that type of thing.

[redacted]: Are you doing an inventory of all of the trees there as part of your study?

MR. CAMPBELL: No. That's not typically part of the study. Have we walked the site? Absolutely.

[redacted]: Are you looking for specimen -- the number of total trees, the number of specimen trees, within that the type of trees?

MR. CAMPBELL: Let me finish my statement. You are encouraged to hire experts -- or to have experts read that draft Environmental Impact Statement and then say, okay, we think this is valid or provide in that

public comment period, which is the purpose of it, the basis by which you think other things need to be evaluated.

And under the law we are required to address that and determine if that's valid or not or to make changes in the EIS before it becomes a final EIS. And so that period between the draft and the final, it is a very critical period. And you are welcome to review that, and experts either agree with the findings and the methodology, or suggest other kinds of things that should be done, or whether it was thorough enough. All that you are asking for is, you're capable of doing as you look at that document and determine that something else should be done.

[redacted]: Are you going to release all of the data you have underlying this type of impact upon the trees, the birds, the mammals?

MR. CAMPBELL: It's all written out. Yes.

[redacted]: And it does not -- you're not intending to actually count the trees and measure the specimen trees as part of your study?

MR. CAMPBELL: It's typically not what is done, no.

UNIDENTIFIED SPEAKER: I would like to come back to make a comment. And I hadn't focused on it before, but we keep talking about the 35 acres of land, this 40 acres of land or whatever. have you considered -- I know you want to save it for future water treatment possibilities and future potential uses. It's probably very good that you have saved the land since the early 1900s.

30-67-AC, BB

But the opportunity cost of this land is extremely valuable. I mean, if you don't go with the monofill, you could potentially sell those 30 acres to some private entity that is going to pay taxes and help offset costs to the City for the next thousand years and you could potentially take that money to subsidize some other the higher cost alternatives to reduce -- to increase the number of opportunities to be considered within your sort of 60 dollar low cost solution which we don't like.

Can you comment on the use of the opportunity costs of the other land available to you? You know, whether you actually sell it off or not is a factor in the economic analysis. Perhaps on the final financial analysis it fits into your rate payers budget.

A proper economic analysis should include that opportunity value of the land.

MR. CAMPBELL: I do not believe we are looking at the opportunity cost to do other things with the land because we do not believe the Aqueduct will every do anything else with the land. And so it's a hypothetical that has no bearing on the analysis.

Now, Tom, if you want to disagree with me or add to that policy on would the Aqueduct sell the land, I don't know that.

UNIDENTIFIED SPEAKER: It should be factored into an economic social analysis of the project.

MR. CAMPBELL: I appreciate your comments.

MR. JACOBUS: The technical factor in this, even though we are functioning as a public water utility and responsible to our customers, EPA, and all of that stuff, the underlying fact is that it is federal property held under the care of the Army Corps of Engineers and we have no authority to sell, give away, trade, lend whatsoever.

The only way that can happen is through proper disposal procedures through GSA or through Congressional acts that would -- would do stuff.

And so the idea that we would sell land for commercial development at our initiative to cover some costs, that is not a factor because that is not an economic factor that we have control over and it is not part of the business model of what we do.

UNIDENTIFIED SPEAKER: Well, I disagree and I think you need to consider that in your continuing evaluation.

UNIDENTIFIED SPEAKER: The scoping meeting in January, I believe it was, was that the meeting that had all of the cookies and the soda and everything else on the tables or was that another one? I've only attended two of these meetings.

MR. CAMPBELL: We did have soda and cookies. It was winter.

UNIDENTIFIED SPEAKER: It wasn't here.

UNIDENTIFIED SPEAKER: Oh, it wasn't here, okay.

The public meeting that was here that about six people showed up. You had more people here than was in the audience.

MR. CAMPBELL: That meeting was in May and was what we call the description of proposed action of

alternatives where we wanted to come to the public and say we have done the screening, before we get to the EIS, we think the members of the public should know what alternatives are being carried forward into the EIS and that was in May, the end of May.

30-68-FB, FE

UNIDENTIFIED SPEAKER: Okay. And that was publicized? I'm sure I heard about it through some public publication.

MR. CAMPBELL: Yes.

UNIDENTIFIED SPEAKER: I was really surprised at the few number of people that were here. I expected to see a crowd like we had tonight. And it made me think that maybe it wasn't quite as --

MR. CAMPBELL: We had advertisements in the two newspapers that Mike mentioned. We also had a wider range of people that we sent letters to. And we obviously have been increasing that range of letters as the public interest has grown.

UNIDENTIFIED SPEAKER: Thank you.

UNIDENTIFIED SPEAKER: I understand that the January meeting also was very poorly attended, other than by the Army Corps of Engineers, that there were very few people from the community even though you publicized

30-69-FB, FE

it. There are a lot of us who don't read the Federal Register.

There are just so many people who hadn't known about this.

How many people were at the January meeting that you're talking about where you say it was publicized so well?

MR. CAMPBELL: I don't remember. I think it was 16 to 20 people.

UNIDENTIFIED SPEAKER: And how many were from the Army Corps of Engineers?

MR. CAMPBELL: Those were people not related to the project.

UNIDENTIFIED SPEAKER: So 16 to 20 people were representative of our community? This is what you publicized and feel was an adequate -- adequate way to tell the community about it. And you're saying we told them, 16 to 20 people were there.

That is not too big of showing of all of the great publicity that you put into that.

MR. CAMPBELL: It was the start of the process and, obviously, the meetings that we've been having this fall were a long continuation of that, and as

1 well as the opening and reopening for more ideas and more
2 alternatives and please give us more. And the 100
3 alternatives that we have on the table were ideas that we
4 have on the table and is an expression of that particular
5 desire to engage.
6 UNIDENTIFIED SPEAKER: I think that Peter
7 -- Peter Ainsley idea about democracy is a wonderful idea
8 that we have a part, the people here in the community to
9 meet with you and talk with you and work with you to find
10 alternatives and help you, because you're in a hard
11 place.
12 You have to answer to the EPA. We
13 understand that. None of us want to pollute the Potomac.
14 We want to find things that are feasible to do. We want
15 to find things that are cost -- you know, we don't want
16 to do something that's cheap in the short run and in the
17 long run it's going to be very expensive, not only to our
18 health, but our well being, our financial, the property
19 values, everything.

30-70-AB

20 You know, in the long run your cheaper way
21 is going to be more expensive. And it's really important
22 that we have -- instead of we come to you, then you make
23 the decision -- that we come to you when you make the

1 decision, that doesn't feel like democracy to me. It
2 doesn't feel like we really worked with you and being
3 part of it, and being part of the decision.
4 I think we would all be much happier if
5 that were a possibility.
6 [redacted]: Again, [redacted], I
7 live in Westmoreland Hills, Maryland.
8 It is quite obvious that the tenor of this
9 discussion is such that you have become very frustrated
10 in the last few minutes in responding to our repeated
11 requests. But it can't even begin to match some of our
12 frustrations when we hear about what these proposals will
13 bring to us.
14 I have in my hand the Washington Post
15 article from October 27 about the -- and correct me if
16 I'm not pronouncing this -- perchlorate.
17 MR. CAMPBELL: Perchlorate.
18 [redacted]: Perchlorate. Thank you.
19 It's a poisonous chemical weapon that has
20 been found in the amount that EPA considers a risk to
21 humans in and around the reservoir property.
22 Now, that is just downright scary. I
23 mean, as it so happens, I have a thyroid problem and I

30-71-KA

1 know that -- and I used to live in the District and used
2 to work the District. And I'll never know -- I'll never
3 know whether or not it was from perchlorate somehow
4 getting into the ground water and getting into the
5 drinking water supply.
6 But I want to -- there is a report here.
7 And this was found, what, in 2003, according to this
8 article. And Mr. Jacobus, the quote is, I don't like the
9 fact that I can't answer the question of how groundwater
10 moves around the reservoir.
11 That is a very frightening idea to me,
12 that there are chemical weapons, poisons in the ground,
13 that I have children and that I live in this area and
14 that you're saying -- you're reporting to us that you're
15 going to do the right thing. But I have no -- Where is
16 the accountability? I mean, you report it to us, but
17 there is no accountability.
18 MR. JACOBUS: Well, I would be happy to
19 talk about that, because it's a very important issue.
20 The way this came up, perchlorate is a
21 manmade, unnatural substance. We have a permit to
22 discharge solids into the river. We also have permits to
23 discharge a continuous stream of ground water which comes

from the sedimentation basins.

The EPA, in working on this Spring Valley site is very interested, as are the Spring Valley residents, of the affects of whatever has been buried there and the long-term effects, soil remediation, arsenic, that type of things. It is a pretty good idea -- I say this as an observer, not as a direct player in this, but there are, as I understand it, pretty good inventories of what was worked on during the days of the 1917, '18 period of time.

So, in order to address the question of what may be in the ground water -- remember, the Washington Aqueduct is what we call a surface water treatment plant. We take water from the Potomac River and we use water that has gone on the surface. We're not pulling well water out of the ground.

So the EPA had an opportunity to go to the out fall that we have down at the Potomac River that has this drainage field under our sedimentation basins. So it was an easy opportunity to get a good sample of the groundwater. And so they went down and they took gallons and gallons of water and sent it off to the lab. What they were looking for were the hundreds of compounds that

matched what was on the inventory of Spring Valley.

They were not looking at concern to the drinking water, per se. They were just using that as an opportunity to see what might be in the groundwater.

And it was very interesting that the -- it came back with none of those elements of concern that were involved in the Spring Valley American University Experiment Station work. There was nothing there of any interest. However, they did find a reading of perchlorate at about -- that first reading was six or seven parts per billion. And so they came back and said that's really odd, because they know that we don't have any perchlorate in our process. It's not a waste product of ours.

And so the gate opens there. Okay, well, that starts off a whole new look, where is that coming from. And so the Post article has a couple of minor technical inaccuracies. There is a sump here at Sibley Hospital in an elevator shaft in one of the new buildings, which is another convenient place. So Sibley granted permission to test the water in that sump. And the reading in that location was 58 parts per billion.

So I think the Post is asserting there is

a limit of one. There is no -- there is no drinking water standard for perchlorate. That is something that is currently under review.

But there appears to be perchlorate in the groundwater and it's moving, as all groundwater would, downhill. So if you kind of look at where we are and here's Sibley toward the out fall that way, the reservoir being over there, there is no known source of that perchlorate.

The Corps of Engineers and EPA are looking at sampling plans that would go around some of the known burial places and -- they are fulfilling their obligation to Spring Valley, and they are going to sink monitoring wells there to evaluate what is coming in and going out in terms of groundwater.

The question come to me am I concerned about perchlorate in the drinking water supply. And the answer is, of course, I'm concerned about it. But because we're a surface water treatment and we have -- EPA has this thing called the Unregulated Contaminant Advisory Board. And they're looking at unregulated contaminants regularly, perchlorate currently being one and they require utilities over a period of time to go

out and get samples, as we did.

So, in 2002, we provided a total of eight samples of the drinking water in accordance with that rule and found no evidence of perchlorate, as we would expect. And that was ahead of this finding in 2003.

So, when we got this finding from EPA, we immediately said, well, wait a minute, we need to protect our interest here and the interest of our consumers and so we began testing samples from the Dalecarlia Reservoir and the finish line. And we found that there was no detection. And the method of detection of it is four parts per billion in the EPA-approved method under the rule.

So my comment says, you know, we are concerned about the drinking water. And I can't tell you with absolute assurance what is moving -- what the groundwater movement is around the reservoir and I would like to be able to do that.

Our tests of the reservoir is -- the fact that we do these analyses daily, weekly, monthly -- there's a whole series of analyses that we report on, none of these elements -- there is nothing out of line in the drinking water. Everything is well below any

contaminant level the drinking water.

But, if there is a potential for something, anything, to get into the groundwater and come into the reservoir, I want to know more about that. But even though our tests of the water itself are showing okay, my comment to the report is, I agree with you, we should know more about this. The perchlorate is unknown, but other threats either now or in the future.

So I have agreed and we are going to install a series of monitoring wells to learn more about the groundwater in our continuing effort to learn more and more about how our whole operation could be affected by those things in the environment.

[redacted]: My point is, is that you have known about this perchlorate since 2003 and yet you still put on the table this dump option in the Dalecarlia woods where runoff and groundwater seepage would be -- are issues. And this is just something that is just astounding.

I'm not a person of a low-level education. I mean, water runs down hill.

MR. JACOBUS: But, also, if were to build such a monofill using all of the appropriate controls,

there would be a line that says the soil material we put in there would not perchlorate into the -- into the groundwater, all of the runoff would be captured in draining structures. We would know what the constituents were in the soil we put in there, so we would know what the leaching material, the PCLP -- the leaching characteristics, we would know what those would be. And so what we might be adding to the runoff as part of our drainage structures, we would know that would be okay.

We wouldn't be affecting negatively or positively the -- what is already the groundwater.

Now, it is very important that we understand -- we, not only the Washington Aqueduct, but the regulators, the EPA, everybody involved in the Spring Valley site, it's very conceivable that the perchlorate that's being observed has nothing to do with the Spring Valley site at all. It could be from someplace at an upward gradient, because, as you said, the pressure of water in the ground and on surfaces go downhill.

So groundwater monitoring map will be created from investigation initially on our property. And from that, if nothing shows that the source of the perchlorate is from anything within the Spring Valley

area, then the look will have to go further.

And that is something that I'm very concerned about. Our engineers have been sitting in meetings with the EPA and the Corps of Engineers, actually have been doing that. So we're watching that very carefully and we will continue to monitor the drinking water.

So, in my drinking water role, I think you're asking right on target in an area that's of interest, that there is no -- the groundwater effects on drinking water are not interacting.

But I do want to continue with a little more things. And this perchlorate story that is here is going to be developed over the next several weeks and months with additional information. We're here to participate in ways that focus directly on our reservoir.

I hope that's not too long an answer.

[redacted]: So it is not coming from Spring Valley, but it is possible it's coming from the Dalecarlia woods because that also was a chemical weapons testing area; am I correct?

MR. JACOBUS: I --

[redacted]: I mean, it's possible.

MR. JACOBUS: Well, anything is possible. I don't know. I don't know. But I do understand, not as first-hand, but second-hand, is that the kind of things that were tested during that period of time, perchlorate -- there may have been trace amounts of it. But the quantities of it that would cause these kind of numbers -- you know, the perchlorate issue nationally is really a 1945 an on because perchlorate is a compound in rocket propellants. And so the weapons were fired and test ranges or weapons manufacturing, or -- facilities and things, when that has gotten down to the groundwater, that can be a great concern, especially to people who are in well fields.

What may have happened in 1916, '17, '18 at the American University Experiment Station, it might have contained trace elements of perchlorate, I have no knowledge of anything that was done there that could be attributed to this. There are some -- further investigation will help figure that out. I will not be surprised -- and I'm just talking to you -- I would not be surprised if, at the end of the day, we found that the source was uphill. Now, I don't have any likely suspects, but I don't know of anything in my

understanding of what was done there that would necessarily contribute to this.

Now, could it come from the Dalecarlia woods? Of course, it could. But all of our analyses that go into the Dalecarlia Reservoir gives no indication that that is, in fact, happening. But, by better understanding the flow patterns, we'll -- we'll know -- that will help us monitor more efficiently and better in the future.

[redacted]: Can I support you on this, Mr. Jacobus?

MR. JACOBUS: I need our support.

[redacted]: Mr. Jacobus just gave a very good, honesty, and broad answer. That's excellent what he just said. The first thing he said was the Post was not totally accurate. I don't like slip-shod journalism and that was an example of slip-shot journalism.

Mr. Jacobus is right, they really don't know, nor did they ever have to worry about before, where the groundwater flows, if it potentially goes under the entire reservoir and down to the river.

Is something were above the reservoir and leaking perchlorate in the water, which is a fairly rare

chemical, even though it does exist, it was used for thyroid treatments, it's probably not enough to have it in the basement of the new Sibley Hospital. It was used for rocket fuel, as he said. It was originally used in AUES for acceleration of things like hand grenades. It's an explosive accelerate. And it was being experimented with here. But you have to have an extreme amount of it somewhere or it could just pop up. There are two sides of the spectrum.

I would not go to alarm right now and I would not take the opinion that he's bluffing you or BSing you. He's not. They don't know what's going on. But the surface water and the creeks flow down and then around the reservoir. And they are doing everything to make sure, pre-emptively now that they know there might be a problem, to find out what's up, to start some wells.

But, remember, folks, go to your Congressman. This costs money. He can't do it -- the Corps can do it without pressure for money. So I make that point here. I'm going be at the City Council tomorrow for about six hours and it's going to be rough and I'll probably loss my job in the military because of all of this, but he's not lying to you. I promise you.

[redacted]: Thank you. And thank you.

[redacted]: Once again, Scott Webber of the Sludge Stoppers.

30-72-NA, FE, FB

I would like to revisit, once again, the criteria. You've heard it over and over again. Obviously, there is a concern by the people who are here and in the public.

I've heard it is an incredibly complex problem, the process, and the details are extraordinary.

I also heard attempts to meet the letter of the law through publication, sending out letters to areas to try to attempt to reach the public, but we've also heard that it failed.

It has not met the spirit of NEPA's intention of getting public input to them.

Whether I'm doing it for myself as an individual, on behalf of 800 persons we talked to with Sludge Stoppers, whether it's the signatures, whether It's 1,500 as far as the greater concerned neighbors, what I would like to do is ask you to formally re-open the criteria development phase of the process.

MR. CAMPBELL: We provided that answer at the last meeting and it hasn't changed from this meeting.

What we re-opened was the opportunity to provide any and all ideas on alternatives that we need to think through. The screening criteria really reflect the purpose and need of the project. And we're preliminary screening alternatives that are then evaluated in greater detail.

So we have made the decision that we're not revisiting those screening criteria, but we would revisit all of the other kinds of ideas and options by which the initial alternatives were screened. So that's the answer to the question.

I will, I guess, draw the meeting to a close. Thank you for your heart-felt contribution and viewpoints and staying here this long.

(Whereupon, at 10:23 the meeting was concluded.)

CERTIFICATE OF REPORTER

I, Linda M. Kia, the Stenomask Reporter who was duly sworn to well and truly report the foregoing proceedings, do hereby certify that they are true and correct to the best of my knowledge and ability; and that I have no interest in said proceedings, financial or otherwise, nor through relationship with any of the parties in interest or their counsel.

IN WITNESS WHEREOF, I have hereunto set my hand this _____ day of _____, 2004.

_____
Linda M. Kia
Certified Verbatim Reporter

Document #31

From:
Sent: Friday, November 19, 2004 10:51 AM
To: Jacobus, Thomas P WAD
Subject: Barge option

31-1-HA

I talked with you staff members about getting rid of Washington Aqueduct's biosolids, and thought the problem was solved by placing the product in the connector sewer and sending it to Blue Plains for additional processing. It now seems that a separate pipe line is required.

Is it possible to go back to the barge concept? A 195 foot barge at 10' freshwater draft carries about 1,668 tons. If the Aqueduct has access via right of ways to the Potomac River anywhere with an 8' draft and say 45' channel it can reach a barge. You will notice pipelines or conveyor belts carrying liquid or solids for miles within Park Service environments where there is a public need. The tug boat for one barge need not be much larger than the tugs now used to pick up debris in the Potomac River although the hp would be much greater but still small for most tugs. It seems that we are talking about one barge up and down a day at most. (At eight feet depth the tons would be 1,250. The width in both cases is 35', so the channel would have to be something more than that.)

It is not important to me that I get in some contest with the Corps, but I do think a barge could be reconsidered. If you want to discuss the barge option some more, I would be pleased to talk with you at your convenience. The thing I do agree most is that the Aqueduct is in a difficult position and I don't envy your options.

Regards,

Document #32

From:
Sent: Monday, January 24, 2005 1:45 PM
To: Peterson, Michael C WAD
Subject: EIS Wastewater

32-1-HA

This is in response to your request for interests in an EIS. Yes, I have an interest but do not wish that it be published unless the Corps sees value in doing so.

I understood that the biosolids from your plant could be piped down to Blue Plains in the present connector line which is of large size. That is the preferred method by me and I would not have anything to do with that.

If on the other hand, a separate pipe line has to be laid, than one might look at barging of product in the cost analysis. Traditionally oil pipe lines have always been the most efficient method of moving oil when compared to barges, trains, and trucks. So that might still be the best option.

After piping, the barge option becomes viable. At some point in the Potomac River an 8-11' draft barge becomes possible by building a short pipe line (or even an enclosed conveyor over wet lands for the Park Service) from your plant to the barge site, certainly above Key Bridge and below the little falls. Then you could load a barge and be done with it in a fairly inexpensive manner when compared to trucks and trains. You would use maybe a third of a barge a day as the rule of thumb is that the barge can hold around 70 truckloads.

The biosolids barge option ran into full blown opposition at Blue Plains but that had nothing to do with barges to the best of my knowledge.

I am a river barge person and by chance four years ago the USACE Water Resources Institute happened to help me out in an important way to me. So on this issue I am not interested in "being noticed" but if I can help, I would be pleased to do so.

Regards,

Document #33

CONCERNED NEIGHBORS
Bethesda, MD
Washington, D.C.

February 14, 2005

VIA HAND DELIVERY

Received TPJ 1645 14 Feb 05

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: Washington Aqueduct Residuals Management Project: Comments on Alternatives

Dear Mr. Jacobus:

These comments are being submitted to you on behalf of Concerned Neighbors, a coalition of citizen groups committed to a sensible and sustainable solution for sludge disposal by the Corps of Engineers/Washington Aqueduct ("Corps"). It is our mission to assure that any changes to the present water treatment facilities will not degrade the existing environment and will not impinge on the established residential character of the surrounding neighborhoods and will provide a permanent solution. Concerned Neighbors is also supported by over 30 other citizen groups and town governments in the Montgomery County/Northwest Washington community.[1]

Piping the Residuals to Alternative Locations is a Reasonable Alternative That Must be Considered in the EIS Process

The Corps needs to seriously consider reasonable alternatives that will move the proposed water treatment facilities out of a well-established, densely populated, residential neighborhood into a more suitable location. The proposed industrial facilities are 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. Members of the community have previously proposed a number of piping alternatives, including piping the residuals to the David

33-1-IA

[1] 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.

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 treatment facilities would fit well in an industrial area that is along a major highway.[2] The Corps cannot use its unduly narrow screening criteria to eliminate these alternatives from further consideration. 33-2-BB

Vehicle emissions, odors, excessive light, noise, and destruction to habitat are just some of the impacts that would impose a tremendous burden on the surrounding residential 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 commercial or industrial in nature. 33-3-BC

We also have serious concerns about the feasibility of building the dewatering facility on the Aqueduct grounds. A prior study reported "strong petroleum-like odors" in borings DC-8, DC-12, DC-13, DC-19, and SWM-1 on the Aqueduct property in the immediate vicinity of the area where the dewatering facility would be located.[3] There is reason to believe that chemical or high explosive munitions may have been buried on the Aqueduct grounds in the area of the proposed dewatering facility.[4] This concern will need to be thoroughly investigated, and dismissed, before construction of a dewatering facility on the Aqueduct grounds can be considered a reasonable alternative. 33-4-BB

<u>The Corps Needs to Thoroughly Evaluate The Serious Adverse Consequences of Trucking</u>

Additionally, any dewatering facility will require significant trucking. According to the information presented to the public at the September 28, 2004 public meeting, the trucking alternative includes disposal by licensed haulers in a range of permitted facilities among seven haul routes using high volume roads. At the September 28, 2004 public meeting, the Corps revealed its predetermined preference for trucking when it indicated that the trucking alternative had "fewer known impacts than the other two alternatives."[5] The Corps based this on the assumption that truck volume will probably not exceed the existing level of service and that volume may be reduced if new technologies can be implemented.[6] Ironically, other alternatives did not survive the screening criteria because they were not "proven methods."[7] This demonstrates the inconsistency of Corps' decision-making process. 33-5-IA

Although the Corps proposed seven potential truck routes and appears to assume that all seven routes are viable options, it has not discussed or presented information on the viability of all truck routes nor the environmental impact on any one route that might eventually be the sole acceptable route for trucking a daily average of nine to twenty truck loads.[8] For example, in 33-6-GA

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[2] See Attachment 1.
[3] *See e.g.,* Boring Logs from *Design Memorandum,* vol. 3, Appendix B, Attachment 2.
[4] *See 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.* Richard D. Albright. ("Albright Report"), Attachment 3
[5] *Emerging Issues Presentation,* Presentation from September 28, 2004 public meeting, p. 7.
[6] *Id.*
[7] *See Alternatives Screening Results*, Presentation from September 28, 2004 public meeting.
[8] Presentation from May 26, 2004 public meeting, p. 28.

1996, the Corps identified 6 or 7 routes but only selected 2 as the "most preferred" routes.[9] The Corps apparently sought only one route because using all 7 routes would be "more expensive and involve city traffic."[10] The dredging project between 1996 and 1999 revealed that trucking was a "major concern for the safety and quality of life of the community. It was evident that any permanent major trucking operations from Dalecarlia would face significant obstacles."[11] The community has raised similar serious issues with trucking regarding safety risks, pollution, damage to residential property, damage to roads, odors, noise, hours of operation and visual impact.[12] Although the Corps recognized that a trucking scheme "would have serious consequences in the residential neighborhoods,"[13] the Corps has summarily dismissed major concerns over issues arising from trucking in order to keep trucking on the table.

The Corps must fully address the costs, wear and tear on the roads, noise, traffic, safety and other 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. The Corps cannot base its decision on a hypothetical trucking solution that turns out to be unrealistic in the end because it was based on unrealistic assumptions. 33-7-GA

In essence, the Corps has predetermined that trucking is the most feasible alternative.[14] The record indicates that the Corps knew of the serious munitions issues affecting the Dump alternative and the lack of room at Blue Plains for building a dewatering plant before those alternatives became two of the three "finalists" to be considered in the Draft Environmental Impact Statement ("DEIS"). The Corps has left these two alternatives on the table, while eliminating others for far less valid reasons. 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. 33-8-IA

<u>The Dump is Not A Reasonable Alternative and Should be Taken Off the Table Now</u>

A report prepared by Richard Albright of the D.C. Department of Environmental Health has proven that the Dump cannot be a feasible 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. Albright wrote an 80+ page report regarding the ongoing Spring Valley munitions investigation, and portions of that report are relevant to the Corps' efforts to construct 33-9-CA

[9] *See* Memorandum from William Colley to Victoria Binetti dated June 10, 1996, p. 2, Attachment 4.
[10] *See id.*
[11] *See Report to Congress*, Attachment 5.
[12] *See e.g.*, Oral Statements from the September 7, 2004 public meeting, 5:13-23, 9:14-23, 10:3-8, 20:14-20.
[13] *See* Jacobus Decl. ¶ 23, Attachment 6. (This declaration relates to the National Wilderness Institute case against the Army Corps of Engineers and was obtained through a FOIA request to the EPA.)
[14] *See Responses to Questions from Ms. Debra Graham*, attached to Letter from Robert Davis to Honorable Paul S. Sarbanes dated September 1, 2004, question 5, Attachment 7 (stating that the monofill will be evaluated "as an alternative to trucking").

a Dump on the Reservoir grounds.[15] Albright's report indicates that a significant volume of chemical and high explosive munitions may be buried on the Reservoir grounds in the area where the Dump might be located. This significant possibility makes construction of the Dump on that location not feasible for health and safety reasons.[16]

> "A narrow gauge railroad was completed on the campus of AUES, one month before the site was closed. . . It is thus plausible that the railroad track, which originated at the AUES, was extended all the way to the Dalecarlia property to dispose of the vast quantities of material on hand at AUES . . . A high level of thallium was found on the Reservoir property and on AU. Elevated arsenic has also been detected on the Reservoir property."[17]

Mr. Albright goes on to recommend that future necessary work at the Spring Valley Site include a geophysical survey of the Dalecarlia Reservoir impact and burial areas and excavation of all anomalies.[18]

The Albright report further reflects a very serious concern that a substantial volume of chemical and high explosive munitions are likely to have been dumped and/or buried in the woods. The report states:

> "The relic hunter [who unearthed approximately 50 artillery shells from a burial pit on the Reservoir grounds around 1984] stated to EPA and myself that he found an anomaly approximately 10 foot by 10 foot. He further stated that the anomaly was comprised of individual shells but that they were so dense as to make it impossible to separate out the individual shells even with a VHF detector with an average search coil. . . I have conducted a geophysical search of nearly all of the area between Dalecarlia Parkway and the road around the Reservoir. I had previously located narrow gauge railroad spikes near the fence and I identified the 5 remaining shells as 75mm shells consistent with those of the Spring Valley era. Finally, the burial pit and rail bed is just south of a large impact area in which I have found numerous pieces of frag."[19]

> "I and my partner at the time, Greg Hope, had previously located an impact area in the Dalecarlia property and recovered shrapnel balls and numerous pieces of frag from Stokes mortars. I also found frag from 75mm shells, suggesting that there was another firing point. I flagged approximately 60 larger anomalies compatible with shells. . . Later I learned that the FUDS boundary was drawn where it was at the request of the Washington Aqueduct, because they did not want the District's major water reservoir associated with the AUES and questions raised about the quality of the drinking water.

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[15] *See* Albright Report, Attachment 3
[16] *Id.*
[17] *Id.*, pp. 31-32.
[18] *Id.*, p. 72.
[19] *Id.*, p. 41.

> However, I had previously examined that issue and found that the creeks draining Spring Valley had been diverted around the reservoir in 1905, long before AUES."[20]
>
> "A resident of Spring Valley also told DOH that he found a live fuze in Dalecarlia as a kid and that his father called the police who confirmed that it was live and took it away."[21]
>
> "Still photographs show the Livens battery ballistically firing shells in the direction of Dalecarlia, which is within range of the livens battery. Also, a live Livens shell was found outside the fenced perimeter of Dalecarlia."[22]

The Corps acknowledged this concern about the potential burial of chemical and high explosive munitions at the November 16, 2004 public meeting yet has failed to remove the Dump from the list of reasonable alternatives. Geophysical investigations to explore the potential for dumped and/or buried munitions are not scheduled to begin until 2008. The munitions issue alone should eliminate the Dump alternative from further consideration.

There is no legitimate reason for continuing to list the Dump as a reasonable alternative to be considered during the DEIS in light of this serious munitions issue. During the November 16, 2004 public meeting, the Corps confirmed that the "Spring Valley Schedule and FFCA deadlines preclude Alternative A from being selected," yet this alternative mysteriously remains on the short list for further evaluation during the DEIS process. This simply does not make sense.

The NEPA Process Followed by the Corps Has a Number of Serious Flaws, as Evidenced by the Corps' Apparent Failure to Coordinate Its Evaluation of Alternatives with Ongoing Water Regionalization Discussions

Despite repeated FOIA requests seeking information about the Corps' communications with cooperating agencies, as required by NEPA, Concerned Citizens has been unable to learn who the cooperating agencies are and the nature of the Corps' communications with them.[23] As a result, we do not know whether the Corps is aware of ongoing discussions about regionalization of the water supply system and how those regionalization efforts would impact the water treatment residuals changes being proposed at Dalecarlia. One of the primary purposes of NEPA is to encourage precisely this type of dialogue so that the agencies will coordinate their planning and avoid what could otherwise be a $60 million mistake. Therefore, until the Corps coordinates its NEPA planning process with DC WASA, WSSC, Montgomery County, Fairfax County and others to find regional solutions to the water treatment residuals issue, it risks expending time and resources on a project that could ultimately be a $60 million mistake. Due to the Corps' failure to disclose through the FOIA process any documents regarding discussions it has had

33-10-BB

[20] *Id.*, p. 47.
[21] *Id.*
[22] *Id.*, p. 77.
[23] Letter from Michael Galano to Tim Anderson dated September 27, 2004, Attachment 8; Letter from Michael Galano to Tim Anderson dated November 24, 2004, Attachment 9; Letter from Michael Galano to Tim Anderson dated February 10, 2005, Attachment 10.

with these other agencies, it remains unclear what efforts are being untaken to ensure a cost-effective solution to regional water supply issues.

We recognize that today's deadline is for new alternatives only. We are in the process of preparing a more detailed analysis of the various continuing legal flaws in the Corps' compliance with NEPA, and we will be submitting that more detailed analysis shortly. We trust that we shall be able to work together to find a mutually beneficial solution that minimizes adverse impacts on the environment while satisfying the Corps' obligations under NEPA.

Very truly yours,

Debra Graham

Elizabeth Adams
WCA Co-Presidents

2617304_v1

Document #34

SludgeStoppers
of Maryland and DC

February 14, 2005

Mr. Tom Jacobus
Chief, Army Corps of Engineers
Dalecarlia Water Treatment Plant
5900 MacArther Blvd
Bethesda, MD 20816

34-1-QA

Dear Mr. Jacobus,

Once again, SludgeStoppers, a group of concerned citizens, hereby submits 40 additional alternatives regarding the proposed Army Corps of Engineers Washington Aqueduct 'residuals and dewatering facility', aka Sludge Factory, planned for your Dalecarlia Campus. As neighbors, friends, and voters, homeowners, and citizens of the area, we applaud the idea of helping to clean up the Potomac by stopping the dumping of residual sludge back into the river, but strongly oppose the planned development of a Sludge Factory in a residential neighborhood in Bethesda, or ANY densely populated residential neighborhood for that matter. Trading one form of pollution for another is simply not acceptable. We believe there are many superior alternatives to your current preselected Dalecarlia site, that would greatly lessen the impact on the affected neighborhoods, and look forward to working with you to identify and realize the best solution.

And while we appreciate your sharing 3 of the 5 volumes of your previous study, and have found them helpful, your continued refusal to release the bulk of the documents in the Concerned Neighbors FOIA request has significantly hampered our ability to fully understand and most competently respond to this opportunity for input. We feel such violation of full disclosure has severely prejudiced our position, and strongly request that you release the requested documents as soon as you are able.

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	Carderock East Dewater & Thicken
2	Carderock East Dewater - Thicken Carderock West
3	Carderock East Dewater - Thicken MC
4	Carderock East Dewater - Thicken Sibley
5	Carderock East Dewater - Thicken Georgetown
6	Carderock West Dewater & Thicken
7	Carderock West Dewater & Thicken MC
8	Carderock West Dewater & Thicken Sibley
9	Carderock West Dewater & Thicken Georgetown
10	Carderock West Dewater & Thicken Carderock East
11	Rockville WTP Dewater & Thicken
12	Rockville WTP Dewater & Thicken MC
13	Rockville WTP Dewater & Thicken Sibley
14	Rockville WTP Dewater & Thicken Georgetown
15	Rockville WTP Dewater & Thicken Carderock East
16	Rockville WTP Dewater & Thicken Carderock West
17	Expand WSSC Potomac - Thicken & Dewater
18	Expand WSSC Potomac Dewater & Thicken MC

ID	Alternative Name
19	Expand WSSC Potomac Dewater & Thicken Sibley
20	Expand WSSC Potomac Dewater & Thicken Georgetown
21	WSSC Potomac Dewater & Thicken Carderock East
22	WSSC Potomac Dewater & Thicken Carderock West
23	WSSC Potomac Dewater & Thicken Rockville
24	Rockville Dewater & Thicken WSSC Potomac
25	CIA Virginia - Thicken & Dewater
26	CIA Virginia Dewater - Thicken MC
27	CIA Virginia Dewater - Thicken Sibley
28	CIA Virginia Dewater - Thicken Georgetown
29	CIA Virginia Dewater - Thicken Carderock East
30	CIA Virginia Dewater - Thicken Carderock West
31	FHA Virginia - Thicken & Dewater
32	FHA Virginia Dewater - Thicken MC
33	FHA Virginia Dewater - Thicken Sibley
34	FHA Virginia Dewater - Thicken Georgetown
35	FHA Virginia Dewater - Thicken Carderock East
36	FHA Virginia Dewater - Thicken Carderock West
37	Rock Run Treatment Plant
38	Expand Blue Plains WWTP - Navy Research
39	Expand Blue Plains WWTP - Potomac Levy
40	Build on Non-Residential Government Land

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:

Carderock East Dewater & Thicken

ID: 1

Description: Purchase or transfer the eastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening and dewatering facilities there. Pipe the unthickened residuals from Daclecarlia inside a raw water conduit. Contract haul the cake 100 feet to I 495.

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:

Carderock East Dewater - Thicken Carderock West

ID: 2

Description: Purchase or transfer the eastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the dewatering facilities there. Purchase or transfer the Westmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening facilities there. Pipe the unthickened residuals from Daclecarlia inside a raw water conduit. Contract haul the cake less than 100 feet to I 495.

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:

Carderock East Dewater - Thicken MC

ID: 3

Description: Purchase or transfer the eastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the dewatering facilities there. Thicken at Dalecarlia, Montgmery County parcel, then pipe the thickened residuals from Daclecarlia inside a raw water conduit to Carderock. Contract haul the cake 100 feet to I 495.

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:

Carderock East Dewater - Thicken Sibley

ID: 4

Description: Purchase or transfer the eastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the dewatering facilities there. Thicken at Dalecarlia, Sibley parcel, then pipe the thickened residuals from Daclecarlia inside a raw water conduit to Carderock. Contract haul the cake 100 feet to I 495.

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:

Carderock East Dewater - Thicken Georgetown

ID: 5

Description: Purchase or transfer the eastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the dewatering facilities there. Upgrade one or more settling basins at Georgetown using plate settling or other high-efficiency process and repurpose at least one of the basins for thickening. Thicken at the new Georgetown basin, then pipe the thickened residuals from Daclecarlia inside a raw water conduit to Carderock. Contract haul the cake 100 feet to I 495.

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:

Carderock West Dewater & Thicken

ID: 6

Description: Purchase or transfer the westmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening and dewatering facilities there. Pipe the unthickened residuals from Daclecarlia inside a raw water conduit. Contract haul the cake less than 1 mile to I 495.

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:

Carderock West Dewater & Thicken MC

ID: 7

Description: Purchase or transfer the wastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the dewatering facilities there. Thicken at Dalecarlia, Montgmery County parcel, then pipe the thickened residuals from Daclecarlia inside a raw water conduit to Carderock. Contract haul the cake 1 mile to I 495.

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:

Carderock West Dewater & Thicken Sibley

ID: 8

Description: Purchase or transfer the wastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the dewatering facilities there. Thicken at Dalecarlia, Sibley parcel, then pipe the thickened residuals from Daclecarlia inside a raw water conduit to Carderock. Contract haul the cake 1 mile to I 495.

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:

Carderock West Dewater & Thicken Georgetown

ID: 9

Description: Purchase or transfer the wastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the dewatering facilities there. Upgrade one or more settling basins at Georgetown using plate settling or other high-efficiency process and repurpose at least one of the basins for thickening. Thicken at the new Georgetown basin, then pipe the thickened residuals from Daclecarlia inside a raw water conduit to Carderock. Contract haul the cake 1 mile to I 495.

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:

Carderock West Dewater & Thicken Carderock East

ID: 10

Description: Purchase or transfer the westmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the dewatering facilities there. Purchase or transfer the eastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening facilities there. Pipe the unthickened residuals from Daclecarlia inside a raw water conduit. Contract haul the cake less than 100 feet to I 495.

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:

Rockville WTP Dewater & Thicken

11

ID:

Description: Purchase a portion or share facilities at the Rockville WTP and build and/or expand the thickening and dewatering facilities there. Pipe the unthickened residuals from Daclecarlia inside a raw water conduit as far as possible, then best practice to Rockville. Contract haul the cake to I 495.

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:

Rockville WTP Dewater & Thicken MC

ID: 12

Description: Purchase a portion or share facilities at the Rockville WTP and build and/or expand the dewatering facilities there. Thicken at Dalecarlia, Montgmery County parcel, then pipe the thickened residuals from Daclecarlia inside a raw water conduit as far as possible, then best practice to Rockville. Contract haul the cake to I 495.

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:

Rockville WTP Dewater & Thicken Sibley

ID: 13

Description: Purchase a portion or share facilities at the Rockville WTP and build and/or expand the dewatering facilities there. Thicken at Dalecarlia, Sibley parcel, then pipe the thickened residuals from Daclecarlia inside a raw water conduit as far as possible, then best practice to Rockville. Contract haul the cake to I 495.

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:

Rockville WTP Dewater & Thicken Georgetown

ID: 14

Description: Purchase a portion or share facilities at the Rockville WTP and build and/or expand the dewatering facilities there. Upgrade one or more settling basins at Georgetown using plate settling or other high-efficiency process and repurpose at least one of the basins for thickening. Thicken at the new Georgetown basin, then pipe the thickened residuals from Daclecarlia inside a raw water conduit as far as possible, then best practice to Rockville. Contract haul the cake to I 495.

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:

Rockville WTP Dewater & Thicken Carderock East

ID: 15

Description: Purchase a portion or share facilities at the Rockville WTP and build and/or expand the dewatering facilities there. Purchase or transfer the eastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening facilities there. Pipe the unthickened residuals from Daclecarlia to Carderock inside a raw water conduit. Pipe the thickened residuals from Carderock inside a raw water conduit as far as possible, then best practice to Rockville. Contract haul the cake to I 495.

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:

Rockville WTP Dewater & Thicken Carderock West

ID: 16

Description: Purchase a portion or share facilities at the Rockville WTP and build and/or expand the dewatering facilities there. Purchase or transfer the westmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening facilities there. Pipe the unthickened residuals from Daclecarlia to Carderock inside a raw water conduit. Pipe the thickened residuals from Carderock inside a raw water conduit as far as possible, then best practice to Rockville. Contract haul the cake to I 495.

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:

Expand WSSC Potomac - Thicken & Dewater

17

ID:

Description:

Expand the existing facilities or build a redundant facility on the WSSC Potomac property. Pipe the unthickened residuals from Daclecarlia inside a raw water conduit as far as possible, then best practice to WSSC Potomac. Thicken and dewater at WSSC Potomac. Contract haul the cake to I 495.

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:

Expand WSSC Potomac Dewater & Thicken MC

ID: 18

Description: Expand the existing facilities or build a redundant facility on the WSSC Potomac property to dewater. Thicken at Dalecarlia, Montgmery County parcel, then pipe the thickened residuals from Daclecarlia inside a raw water conduit as far as possible, then best practice to WSSC. Contract haul the cake to I 495.

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:

Expand WSSC Potomac Dewater & Thicken Sibley

ID: 19

Description: Expand the existing facilities or build a redundant facility on the WSSC Potomac property to dewater. Thicken at Dalecarlia, Sibley parcel, then pipe the thickened residuals from Daclecarlia inside a raw water conduit as far as possible, then best practice to WSSC. Contract haul the cake to I 495.

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:

Expand WSSC Potomac Dewater & Thicken Georgetown

ID: 20

Description: Expand the existing facilities or build a redundant facility on the WSSC Potomac property to dewater. Upgrade one or more settling basins at Georgetown using plate settling or other high-efficiency process and repurpose at least one of the basins for thickening. Thicken at the new Georgetown basin, then pipe the thickened residuals from Daclecarlia inside a raw water conduit as far as possible, then best practice to WSSC Potomac. Contract haul the cake to I 495.

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:

WSSC Potomac Dewater & Thicken Carderock East

ID: 21

Description: Expand the existing facilities or build a redundant facility on the WSSC Potomac property to dewater. Purchase or transfer the eastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening facilities there. Pipe the unthickened residuals from Daclecarlia to Carderock inside a raw water conduit. Pipe the thickened residuals from Carderock inside a raw water conduit as far as possible, then best practice to WSSC Potomac. Contract haul the cake to I 495.

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:

WSSC Potomac Dewater & Thicken Carderock West

ID: 22

Description: Expand the existing facilities or build a redundant facility on the WSSC Potomac property to dewater. Purchase or transfer the westmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening facilities there. Pipe the unthickened residuals from Daclecarlia to Carderock inside a raw water conduit. Pipe the thickened residuals from Carderock inside a raw water conduit as far as possible, then best practice to WSSC Potomac. Contract haul the cake to I 495.

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:

WSSC Potomac Dewater & Thicken Rockville

ID: 23

Description: Expand the existing facilities or build a redundant facility on the WSSC Potomac property to dewater. Purchase a portion or share facilities at the Rockville WTP and build and/or expand the dewatering facilities there. Pipe the unthickened residuals from Daclecarlia to Rockville inside a raw water conduit as far as possible, then best practice to Rockville. Pipe the thickened residuals from Rockville to WSSC Potomac using best practice. Contract haul the cake to I 495.

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:

Rockville Dewater & Thicken WSSC Potomac

ID: 24

Description: Expand the existing facilities or build a redundant facility on the Rockville WTP property to dewater. Purchase a portion or share facilities at the WSSC Potomac WTP and build and/or expand the thickening facilities there. Pipe the unthickened residuals from Daclecarlia to WSSC inside a raw water conduit as far as possible, then best practice to Potomac. Pipe the thickened residuals from WSSC Potomac to Rockville using best practice. Contract haul the cake to I 495.

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:

CIA Virginia - Thicken & Dewater

ID: 25

Description: Build a thickening and dewatering facility at the secure CIA property by Turkey Run in Virginia. Pipe the unthickened residuals from Daclecarlia to the CIA property across the Potomac using best practices. Thicken and dewater at on-site at CIA. Contract haul the cake to I 495 via 193 or 123.

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:

CIA Virginia Dewater - Thicken MC

26

ID:

Description: Build a thickening facility at the secure CIA property by Turkey Run in Virginia. Thicken at Dalecarlia, Montgmery County parcel, then pipe the thickened residuals from Daclecarlia to the CIA property across the Potomac using best practices. Dewater at on-site at CIA. Contract haul the cake to I 495 via 193 or 123.

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:

CIA Virginia Dewater - Thicken Sibley

ID: 27

Description: Build a thickening facility at the secure CIA property by Turkey Run in Virginia. Thicken at Dalecarlia, Sibley parcel, then pipe the thickened residuals from Daclecarlia to the CIA property across the Potomac using best practices. Dewater at on-site at CIA. Contract haul the cake to I 495 via 193 or 123.

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:

CIA Virginia Dewater - Thicken Georgetown

ID: 28

Description: Build a thickening facility at the secure CIA property by Turkey Run in Virginia. Upgrade one or more settling basins at Georgetown using plate settling or other high-efficiency process and repurpose at least one of the basins for thickening. Thicken at the new Georgetown basin, then pipe the thickened residuals from Georgetown to the CIA property across the Potomac using best practices. Dewater at on-site at CIA. Contract haul the cake to I 495 via 193 or 123.

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:

CIA Virginia Dewater - Thicken Carderock East

ID: 29

Description: Build a thickening facility at the secure CIA property by Turkey Run in Virginia. Purchase or transfer the eastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening facilities there. Pipe the thickened residuals from Carderock to the CIA property across the Potomac using best practices. Dewater at on-site at CIA. Contract haul the cake to I 495 via 193 or 123.

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:

CIA Virginia Dewater - Thicken Carderock West

ID: 30

Description: Build a thickening facility at the secure CIA property by Turkey Run in Virginia. Purchase or transfer the westmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening facilities there. Pipe the thickened residuals from Carderock to the CIA property across the Potomac using best practices. Dewater at on-site at CIA. Contract haul the cake to I 495 via 193 or 123.

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:

FHA Virginia - Thicken & Dewater

ID: 31

Description: Build a thickening and dewatering facility at the secure FHA property by Turkey Run in Virginia. Pipe the unthickened residuals from Daclecarlia to the FHA property across the Potomac using best practices. Thicken and dewater at on-site at FHA. Contract haul the cake to I 495 via 193 or 123.

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:

FHA Virginia Dewater - Thicken MC

ID: 32

Description: Build a thickening facility at the secure FHA property by Turkey Run in Virginia. Thicken at Dalecarlia, Montgmery County parcel, then pipe the thickened residuals from Daclecarlia to the FHA property across the Potomac using best practices. Dewater at on-site at FHA. Contract haul the cake to I 495 via 193 or 123.

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:

FHA Virginia Dewater - Thicken Sibley

ID: 33

Description: Build a thickening facility at the secure FHA property by Turkey Run in Virginia. Thicken at Dalecarlia, Sibley parcel, then pipe the thickened residuals from Daclecarlia to the FHA property across the Potomac using best practices. Dewater at on-site at FHA. Contract haul the cake to I 495 via 193 or 123.

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:

FHA Virginia Dewater - Thicken Georgetown

ID: 34

Description: Build a thickening facility at the secure FHA property by Turkey Run in Virginia. Upgrade one or more settling basins at Georgetown using plate settling or other high-efficiency process and repurpose at least one of the basins for thickening. Thicken at the new Georgetown basin, then pipe the thickened residuals from Georgetown to the FHA property across the Potomac using best practices. Dewater at on-site at FHA. Contract haul the cake to I 495 via 193 or 123.

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:

FHA Virginia Dewater - Thicken Carderock East

ID: 35

Description: Build a thickening facility at the secure FHA property by Turkey Run in Virginia. Purchase or transfer the eastmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening facilities there. Pipe the thickened residuals from Carderock to the FHA property across the Potomac using best practices. Dewater at on-site at FHA. Contract haul the cake to I 495 via 193 or 123.

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:

FHA Virginia Dewater - Thicken Carderock West

ID: 36

Description: Build a thickening facility at the secure FHA property by Turkey Run in Virginia. Purchase or transfer the westmost tip of the Carderock Navy Research Center from the Navy to the ACE and build the thickening facilities there. Pipe the thickened residuals from Carderock to the FHA property across the Potomac using best practices. Dewater at on-site at FHA. Contract haul the cake to I 495 via 193 or 123.

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:

Rock Run Treatment Plant

ID: 37

Description: Build a new thickening and dewatering facility in the old Rock Run right-of-way.

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:

Expand Blue Plains WWTP - Navy Research

ID: 38

Description: Expand the Blue Plains WWTP through cooperative agreement with the Navel Research Lab to allow use of their southern border. Build thickening and dewatering facilities for the entire region. Pipe either unthickened or thickened residuals from WAD to Blue Plains via best practices.

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:

Expand Blue Plains WWTP - Potomac Levy

ID: 39

Description: Expand the Blue Plains WWTP through cooperative agreement with the Army Corps of Engineers allowing the development of a levy reaching into the Potomac using fill from the Blue Plains solids removal processes. Build thickening and dewatering facilities for the entire region on this newly created levy. Pipe either unthickened or thickened residuals from WAD to Blue Plains via best practices.

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:

Build on Non-Residential Government Land

ID: 40

Description: Build the thickening or the dewatering or both of them together, or any combination on any parcel or parcels of government controlled land, be it Federal, State, County, or Disctrict. The site must be located in the area that impacts the fewest number of people, both at the operation site, as well as any transit route for the disposal of the resulting residuals.

Document #35

March 2, 2005 - ANC Meeting Comments

The questions from the commissioners were:

35-1-GD

1. Would you use smaller trucks (and hence more of them) to be able to have access to the more residential areas?

35-2-CA

2. Was this (the monofill) a permanent solution?

35-3-GA

3. What would the hours of trucking be?

35-4-AB

4. What are the relative capital costs?

35-5-AA

5. How is this going to be paid for?

35-6-BA

6. What architectural look is proposed?

35-7-GB

7. Isn't trucking a "low tech" solution?

35-8-GB, PA

8. Are other utilities using more innovative and better approaches?

Document #36

Description of Proposed Action and Alternatives (DPOAA) Meeting Summary

EIS for a proposed water treatment residuals management process

Date and Location

The DOPAA meeting was held on Wednesday, May 26, 2004 from 7:00 to 9:00 P.M. at the Sibley Memorial Hospital Ernst Auditorium. The hospital is located at 5255 Loughboro Road NW, Washington, DC, close to the Dalecarlia Treatment Facility and adjacent to a site of one of the project's alternatives.

Public Notification

A display advertisement ran in the *Northwest Current* on Thursday, May 20 and in the *Washington Post* on Monday, May 24.

Approximately one week prior to the meeting, a personal invitation was mailed to 144 neighbors living in the vicinity of the Dalecarlia Reservoir grounds in Maryland and 88 letters were sent to residents in the District of Columbia

Format and Content

The public meeting started with a slide presentation followed by an open house question and answer session. The presentation slides are available in a pull-down menu under the category Public Meetings and Events on the project website.

Copies of the DOPAA were available to interested meeting attendees. (?)

Summary of Public Comments

Sixteen people attended the DOPAA meeting. Thomas Jacobus, General Manager of the Washington Aqueduct, gave an opening presentation that focused on the process used to identify and then screen alternatives to be evaluated in detail in the Environmental Impact Statement. The appearance and operation of the proposed residuals monofill emerged as a dominant theme during the question and answer period that followed the presentation. Additional comments focused on truck traffic, other alternatives to consider for the Feasibility Study and residuals disposal technologies.

The following comments and questions were discussed at the meeting.

- Please put the traffic map on the project web site. Such a map will give the neighbors a basis for deciding which routes they might prefer. Interested in having the Little Falls Parkway included in the potential routes. **36-1-GD**

- Isn't "Mt. Siltmore" just another bandaid? What happens after 20 years? **36-2-CA**
- Where is the monofill? You've already trucked out the reservoir once. **36-3-CA**
- Why can't you excavate to such a depth that we can't see the monofill? Why not build it on the other side of McArthur Blvd? Why not build an underground conveyor belt to avoid having to truck residuals from the processing facility to the monofill? **36-4-IA**
- The monofill appeals to me. All of our alternatives are low-tech, proven technologies, essentially using brute force like pipes and pumps and things. The monofil gives you the option for new technologies to come into place over time. It appeals to me as a 20 year stop-gap measure allowing new technologies to come on line. **36-5-IA**
- Is anyone from EPA or DC Health department at the meeting? **36-6-IA**
- The monofill has three areas of interest for the Spring Valley site. In 1986 a civil war buff tresspassed onto the property on two occasions and picked up 50 shells. He decontaminated them in his home and found 45 of them to be chemical filled. The monofill may help us clean up this material. How much soil excavation will take place? **36-7-CA**
- How do you divorce cost from this equation at this point? We're eventually going to have to pay for it. **36-8-NB**
- Is it fair to conclude that the monofill is the least expensive alternative at this point. **36-9-CA**
- Do you plan to restore the riverbed to its historic nature? **36-10-IA**
- We need to study the yearly maintenance costs to get a full handle on the overall costs. **36-11-AB**
- Give us a picture on how much pollution will come from the residuals facility, in terms of noise, air and visual. **36-12-FB**
- Could you use the little back road off the Clara Barton Parkway as a dedicated route from the residuals facility? **36-13-GD**
- Barge the residuals to a downstream dewatering facility. Electric barges would have zero impact. **36-14-HA**
- Can't you just throw a 12 inch pipe in the Potomac straight down to Blue Plains? **36-15-DG**
- The no – action alternative has been the historical alternative. This scares me. **36-16-JA**
- Who will take the residuals – West Virginia, or Liberia? **36-17-EA**
- You certainly have a lot of trucks coming in and out of the facility now, don't you? **36-18-IA**
- Please develop visual simulations for people to understand what these facilities will look like. **36-19-BA**
- What is the difference between centrifuge and plate & frame dewatering? Please look at various operating aspects, including noise. **36-20-EB**

- Why can't the Park Service give up something (referring to the land adjacent to the Dalecarlia Treatment Facility campus) because the neighborhood is going to give up something? **36-21-IA**
- Could sediment be treated to make it more useful for agricultural purposes? **36-22-EA**
- What is the difference between runoff from land application and discharging into the river? **36-23-EA**

Document #37

CONCERNED NEIGHBORS
Bethesda, MD
Washington, D.C.

November 15, 2004

VIA HAND DELIVERY

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: Washington Aqueduct Residuals Management Project: Comments on Alternatives

Dear Mr. Jacobus:

This letter is being submitted to you on behalf of Concerned Neighbors, a coalition of citizen groups committed to a sensible and sustainable solution for sludge disposal by the Corps of Engineers/Washington Aqueduct. It is our mission to assure that any changes to the present water treatment facilities will not degrade the existing environment and will not impinge on the established residential character of the surrounding neighborhoods and will provide a permanent solution. The residents represented by Concerned Neighbors are demanding that the Corps re-open the NEPA process to provide for a meaningful opportunity to examine a wider range of alternatives. Concerned Neighbors is also supported in this demand by over 30 other citizen groups and town governments in the Montgomery County/Northwest Washington community.

37-1-QA

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.

We have attached to this letter petitions signed by a majority of the residents in the neighborhoods represented by Westmoreland Citizens Association.

We are greatly disturbed by the Army Corps of Engineers' ("Corps'") ongoing unwillingness to follow the strict procedural requirements of the National Environmental Policy Act ("NEPA").

37-2-NC, FE

One of the most critical objectives of this statute is to provide the citizens who will be most directly impacted by a proposed major federal action a meaningful opportunity to comment on that action and potential alternatives. The Corps has failed to provide for meaningful public participation in this matter since it was first announced in January of this year. The Corps has failed to notify the communities that would be most directly impacted by the alternatives at each of the relevant stages in the process – failures that cannot be corrected "retroactively" -- and has failed to provide the affected communities with critical documents that are relevant to evaluating those alternatives.

We previously outlined in a letter dated October 5, 2004, our concerns about the deficiencies in the NEPA process (copy attached). Our attorneys then described in a more detailed letter to EPA Region III (copy attached) the ways in which the Corps' actions to date have been inconsistent with the strict procedural requirements of NEPA. Nevertheless, as evidenced in your recent letters to us (copies attached), you have chosen to ignore your obligations under that statute. These deficiencies cannot be corrected now by simply opining that you believe that you have gone "beyond [the] requirements under NEPA". Simply saying it doesn't make it so.

You have had nine years to study alternatives to the Corps' current practice of disposing water treatment residues directly into the Potomac River. You have admitted that most of the 26 alternatives that were originally considered in the May 2004 Engineering Feasibility Study were

37-3-MB

taken from a study prepared in 1995 by Whitman Requardt and Associates. We have requested those studies as part of the documents pertaining to the scoping process, and other critical information, in a FOIA request that was submitted to the Corps on September 27, 2004 (copy attached). We have not received those documents, despite their relevance to our ability to comment on alternatives in response to your artificially imposed "comment" deadline of November 15, 2004. We have also not received those documents despite the Corps' initial determination that it would grant our FOIA request (copy attached), despite an in-person request for copies of the documents, and despite several follow-up phone calls and letters requesting a date certain by which we could expect to receive those critical documents (copies attached).

Because of your refusal to make those documents available to us, our response must of necessity be partial and incomplete. We have made our best effort to identify other alternatives that should be evaluated by the Corps as part of the EIS process, despite your refusal to provide us with critical documents that have been in your possession for the past nine years – documents that you have admitted provided the basis for the 26 alternatives that were originally placed on the table

37-4-FE, NB

for consideration in the EIS process. We do not agree with your decision to remove 23 of the original 26 alternatives from further consideration without the benefit of public comment or review, and we request that those alternatives be put back on the table for further evaluation.

Our new suggested alternatives include the following, as described in greater detail in the attached letter from SCS Engineers:

- Use new or existing outfall piping to transport residuals to the Potomac River without dewatering, and then transport via barge to a bioreactor landfill
- Using the existing outfall piping to transport residuals to the Potomac River without dewatering, and transport via new riverbed pipeline to Blue Plains for treatment
- Construct new pipelines within existing pipelines
- Reduce volume of residuals requiring management by relocating or redesigning the intake structure(s)
- Reduce the volume of residuals requiring management through active management of raw water intake
- Use alternative processes for coagulation of sediments to reduce the volume of residuals requiring management

37-5-CA

SCS has raised other substantive concerns about the Corps' NEPA analysis to date in its November 12, 2004 letter, such as the District's prohibition on the discharge of any solid waste, hazardous waste, or medical waste unless the site has been authorized for that purpose, and the fact that there are no regulations authorizing the siting of such a dump in the District at the present time. We expect that you will take these restrictions on the Corps' ability to site a dump into consideration in your analysis of the alternatives.

The community has followed the rules, but the Corps has not. The requirements of NEPA are very clear and specific. The public has a right to participate fully in the development of alternatives to the current discharge practices. Until you provide us with the documents that we requested in our FOIA request – many of which should have been made available to the public at the initial scoping meeting – we will not have the ability to comment meaningfully on the alternatives, and the NEPA process will remain deficient. The record must remain open to other alternatives until such time as we have been provided with an opportunity to review and analyze the critical documents that we have requested.

Sincerely yours,

Attachments:

1. Neighborhood Petitions
2. October 5, 2004, letter from Concerned Neighbors to Thomas P. Jacobus
3. Holland & Knight letter to Mr. Jon Capacasa of EPA Region III, dated October 22, 2004
4. Army Corps letters dated November 2, 2004, to Debra Graham and Elizabeth Adams
5. Freedom of Information Act request from Holland & Knight to the Army Corps of Engineers dated September 27, 2004
6. October 6, 2004 letter from Army Corps of Engineers to Holland & Knight tentatively granting FOIA request
7. October 29, 2004, letter from Holland & Knight to Mr. Michael S. Fraer, U.S. Army Corps of Engineers, regarding status of documents responsive to September 27, 2004 FOIA request
8. November 4, 2004 letter from Holland & Knight to Mr. Tim G. Anderson, U.S. Army Corps, regarding status of documents responsive to September 27, 2004 FOIA request
9. SCS Engineers letter regarding alternatives dated November 12, 2004

2385571_v1

Document # 38

Peterson, Michael C WAD

From:

Sent: Monday, January 24, 2005 9:23 PM

To: Peterson, Michael C WAD

Cc:

Subject: Re: Washington Aqueduct Residuals EIS

Dear Mr. Peterson,

Thank you for sharing this critical update with the community. Your active efforts to disseminate information are greatly appreciated.

As you may remember, we had the opportunity to meet a few months ago to review this proposal since my house is located quite close to the Dalecarlia plant, and as you know, you had helped greatly in clarifying and sharing information at our meeting. Since then I have worked with people from the Brookmont Civic League and the Sludgestoppers to ensure we are well-informed and educated about this process.

I note a new report dated December 20, 2004. Frankly this realm of issues is not within my forte as a civil rights attorney and I will probably have trouble following the report intelligently even if I had the time to read all 86 pages of it. However I skimmed it to the best of my ability and noted that Figure 2-8 on page 69 (?) illustrated a proposed site for the "sludge factory" near Sibley Hospital. This site seems to be a much better location for the new building should it be built based on its location already along a road and with less residential households adversely affected. With the aesthetics the hospital's operations should not be affected in the least bit. People do not go to the hospital for the view in other words, they go to get the exemplary medical care and treatment which will be maintained despite the new building, and with the additional employees which will be needed to man the facilitity there is also the rather large bus stop available for transportation needs for the employees on Loughboro.

38-1-IA

Please let me know what your thoughts are on selecting this proposed site instead of in Montgomery county in back of a group of residential homes with rather small children involved (e.g., mine are age 4, 4, and 3, and my neighbor has a 1.5 year old and another baby due soon). I sincerely hope you and your colleagues will give my request to implement this DC site selection serious thought and approval. I look forward to speaking with you at your earliest convenience.

Sincerely,

"Peterson, Michael C WAD" <Michael.C.Peterson@wad01.usace.army.mil> wrote:

> This is an update on the status of our development of an Environmental Impact Statement to identify a means of managing the Washington Aqueduct water treatment residuals.
>
> The specific documents that were requested by various stakeholders are now available on the Washington Aqueduct website (http://washingtonaqueduct.nab.usace.army.mil/aqueduct.htm. Other information has also been added to the website including the scientific documents prepared during the permit development process.
>
> Washington Aqueduct is currently seeking input from the public regarding any alternatives not already

considered. New alternatives may be proposed to Washington Aqueduct by February 14, 2005 by using the website comment form <http://washingtonaqueduct.nab.usace.army.mil/cgi-bin/contact>, by sending an email to michael.c.peterson@usace.army.mil <mailto:michael.c.peterson@usace.army.mil>, or by sending a letter to:

Washington Aqueduct
5900 MacArthur Boulevard, NW
Washington, DC 20016-2514
Attn: Michael Peterson

Thank you for your continuing involvement in the development of the Environmental Impact Statement.

Very Respectfully,

MICHAEL C. PETERSON
Environmental Engineer
Washington Aqueduct
5900 MacArthur Boulevard, NW
Washington, DC 20016-2514
michael.c.peterson@usace.army.mil

Document #39

Peterson, Michael C WAD

From:

Sent: Thursday, September 30, 2004 10:40 AM

To: Jacobus, Thomas P; Peterson, Michael C

Subject: Suggested Alternative

Goodmorning Washington Aqueduct!

Sounds like there is still a hostile crowd out there.

39-1-GD

I walked behind the aqueduct, down the CCT and discovered there are additional buildings on the back side of the aqueduct and an access road that runs under the CCT. Could you build a road from that part of the facility that would exit onto Clara Barton Parkway? It would allow you to truck out the back rather than through the community. Even if this alternative works you would still be faced with the need for a centrifuge and I understand Brookmont is not happy about the proposed location or the size of the building.

Just a thought.

Document #40

Peterson, Michael C WAD

From: Verharen, Charles C. [cverharen@Howard.edu]
Sent: Tuesday, February 10, 2004 3:58 PM
To: 'michael.c.peterson@usace.army.mil'
Subject: Waste Management Plan

Dear Mr. Peterson,

I'm very sorry I missed the public meeting for comment. I include the comment I just sent to your website below.

I'd very much appreciate your response.

Many thanks!

I am most concerned about what is called the "no action" scenario in the project literature.

"No action" can only be an appropriate action if pollution rights are traded with upriver sources. Pollution rights trading cannot address the damage to the river that the new EPA discharge permit addresses.

The "no action" scenario must be struck from the research agenda.

The primary focus of the water treatment residuals management research must be on minimum harm to the environment taken in a holistic context. That is, benefits of proposed remediation plans to river water quality must not come at the expense of air quality, either to the Washington Aqueduct neighborhood or the greater Washington area.

Energy costs for remediation must be proportional to benefits. Hence removing Washington Aqueduct sludge to Blue Plains by sewer pipe or barging is appealing because of the economies of scale available through the existing Blue Plains plant.

Air-drying the sludge before removal by truck via an access road direct to the Clara Barton Parkway may be may be more environmentally and fiscally sound than constructing and supporting a dewatering plant at the Aqueduct.

In short, I want to see a research plan that is grounded in environmentally sound and ethical principles. None of the documents pertinent to the waste management suggest that the research will be grounded in such principles.

40-1-EB

Document #41

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Tuesday, February 10, 2004 4:24 PM
To: Peterson, Michael C
Cc: Schultz, Paula
Subject: Comments on Proposed Water Treatment Residuals Management Process

41-1-JB

Specific Comments	I wish to add further comments. The Memorandum of Understanding between the EPA and the Corps of Engineers states that the Corps had already agreed to stop discharges during the spawning season before the issuance of the new permit. Several fishermen on the Potomac have told me that the Corps discharged quite frequently during last year's spawning season. What is the truth of the matter? Second, the MOU calls for notification of EPA, the administration of the C&O Nat'l. Hist. Park, and others of any Aqueduct discharge. Why can't this discharge information be made available to the public, both so that the interested public can monitor the length of the discharges as mandated in the new permit, the times of discharge, as well as the river volume at the time of discharge. The fishing public may well have a keener interest in the matter of the discharge than other interested parties. Third, I have talked with Mr. Jacobus over the past few years about stopping discharge during the spawning season, and he has said that water quality cannot permit complete cessation during that several months long period. What is the truth of this matter? Is it the case that the Aqueduct cannot deliver clean water to its customers without discharging during the spawning season. Fourth, what effect will the city-wide concern about lead in the drinking water have on treatment management? Will the Aqueduct switch from chloramine back to chlorine? Thank you for your attention
Name	
Agency	Department of Philosophy, Howard University
E-Mail Address	
Telephone Number	
Please Contact	ContactRequested

Document #42

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Thursday, June 03, 2004 6:54 PM
To: Peterson, Michael C
Cc: Schultz, Paula
Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments

Mr. Thomas Jacobus: In reference to an article in The Current concerning sediment disposal at Dalecarlia, there is a good chance that Pollinger & Company can provide numbers and equipment performance that may resolve the problem to most people's satisfaction. There are however gaps in our available information that could negatively impact on our proposal. Along with your ice records on the Potomac, we have several other questions which may already have been answered in your earlier truck and barge examintions. In light of these concerns I would be pleased to meet with you to ask these questions as well as to present our option. The whole initial meeting would not take over 20 minutes. Our concept is known as the Mod 1 Hull and Port (patent pending). In 2001 we made the concept presentation at meeting which was partially sponsored by the USACE,IWR. Since then the concept has greatly advanced. I look forward to meeting with you.
Regards,

42-1-HA

Name
Agency
E-Mail Address
Telephone Number
Please Contact ContactRequested

Document #43

Peterson, Michael C WAD

From:

Sent: Monday, May 24, 2004 1:41 PM

To: Jacobus, Thomas P

Cc: Peterson, Michael C

Subject: Sediment disposal options

May 24, 2004

TO: Thomas P. Jacobus, General Manager, Washington Aqueduct
Michael Peterson, Environmental Specialist

Re: Alternatives for disposing of sediments

Dear Mr. Jacobus and Mr. Peterson:

In preparing for the May 26 meeting, I would like to present some questions, perhaps at the meeting, that will help me understand how you narrowed 26 alternatives to three and the costs involved in the three chosen alternatives versus costs in alternatives rejected:

1. The total amount of sediment in terms of volume, both wet and dry, measured in tons per day? 43-1-EC

2. The chemical composition of the sediments? How much organic, how much inorganic? The percentage of alum and other chemicals? Can the sediments be used to grow plants or grass? 43-2-KC, EA

3. The daily number of trucks required to haul the sediments to a landfill? What streets in the Palisades and Northwest Washington would be used by the trucks to get to a landfill? 43-3-GE, GD

4. If the sediments are contaminated, as EPA holds in banning the discharges, under current and evolving EPA policy would it be permissible to deposit the sediments in a landfill? 43-4-EA

5. The cost per ton to remove water from the sediments and to load them on to truck? What technique would be used and what would be the capital cost to construct the centrifuge or other technique? The cost to haul the sediment to a dump site? The tipping fee for dumping the sediment in a landfill? 43-5-AB

[As I am sure you appreciate, cost becomes a major factor in deciding among alternatives, since the cost ultimately will be borne not by the Army Engineers but by us consumers in increased rates. It would be helpful if you could present a cost comparison of 26 alternatives .jwf]

43-6-CA

6. If the sediments were deposited on the site of the Washington Aqueduct, where would the site be? What would be its capacity? Would private parties be able to pick up the sediments, as was the case in the dredging of Dalecarlia Reservoir? What are the estimated costs of on-site disposal?

7. Did your contractor who surveyed alternatives consult with EPA's Region 2 Program Manager for Contaminated Sediment on various advanced technologies that office has been studying for

getting rid of contaminated harbor sediment? 43-7-EB

8. What would be the costs of constructing and operating a pipeline to the Blue Plains Wastewater Treatment Plant? Would Blue Plains be capable of handling the sediments from the Aqueduct, or would changes have to be made and at what cost? 43-8-AB, DC

9. Since two scientific studies have shown that the discharge of the sediments cause no damage to plant and fish life in the Potomac River, why not adopt the "no action" alternative? 43-9-JA

Respectfully submitted with great gratitude for your past cooperative attitude in dealing with concerns of neighbors who might be adversely affected by a "no-discharge" policy.

Co-Chair CRUDD
ANC3D04

Document #44

Peterson, Michael C WAD

From:

Sent: Friday, June 18, 2004 11:43 AM

To: Peterson, Michael C

Cc:

Subject: EIS and related activities relating to Proposed Water Treatment Residuals Management Process

Dear Mr. Peterson,
Per the Federal Register notice on January 12, 2004 (Volume 69, Number 7)], we would like to be kept informed and receive relevant documents relating to proposed changes of the Residuals Management Process for the Washington Aqueduct.

We are interested in this both as enivornmentally concerned citizens and as neighbors of Dalecarlia.

Please send written materials and notices to:

44-1-NC

Thanks!

Document #45

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Sunday, January 11, 2004 2:12 PM
To: Peterson, Michael C
Cc: Schultz, Paula
Subject: Comments on Proposed Water Treatment Residuals Management Process

Type of Comment	Suggestion
Nature of Concern	(Other)
Nature of Concern	Whitney Point Resevoir
Specific Comments	I was considering purchasing land that is landlocked by the Corp. Am I allowed to cross this property. What if I want to cut a few trees and remove them, how do I get out? Can I use a 4-wheeler to cross the property? Can you forward this to someone who can help? Thanks,
Name	
Agency	
E-Mail Address	
Telephone Number	
Please Contact	ContactRequested

This document was received on the residuals project website. It does not appear to apply to the project.

Document #46

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Wednesday, July 14, 2004 8:06 AM
To: Peterson, Michael C
Cc: Schultz, Paula
Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments

I am a resident of the Westmoreland community and have learned about your plans for a 30 acre dump at the Dalecarlia Treatment facility. I urge you to bring this proposal to a public hearing so that all options can be considered before proceeding. Having grown up and lived in this neighborhood for 35 years, I have always felt that the Dalecarlia Woods are a special part of this area in times when much of our natural surroundings are being cut down. Please do the right thing and take a socially responsible approach to your proposal, so the solid reputation of the U.S. Army Corps of Engineers will be maintained. Thank you,

46-1-IA

Name

Agency

E-Mail Address

Telephone Number

Please Contact

Document #47

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Monday, July 19, 2004 2:24 PM
To: Peterson, Michael C
Cc: Schultz, Paula
Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments	I can't believe what I'm hearing about your proposal to clearcut the Dalecarlia woods for a sludge dump. As a neighbor, I totally oppose this project. It sounds absurd!! No more dumping in the Spring Valley area. Hasn't arsenic and munitions been enough?
Name	
Agency	
E-Mail Address	
Telephone Number	
Please Contact	ContactRequested

47-1-IA

Document #48

Peterson, Michael C WAD

From:

Sent: Wednesday, July 28, 2004 4:47 PM

To: 'Peterson, Michael C WAD'

Subject: RE: Comment on Residuals Project

48-1-NC

Thank you so much for your response. If the Corp has been working on this for so long, I'm really curious why our Community Association was not informed until just recently. Aren't there citizen participation requirements for something of this magnitude? Certainly you can't ignore the community that sits right next to this awful proposal. Thanks for taking the time to respond. We've had live ordinance and arsenic scares and problems in the Spring Valley and surrounding areas for many years. Enough is enough. I think these toxins need to go somewhere else. We've had our share of toxins and associated scares.

-----Original Message-----
From: Peterson, Michael C WAD [mailto:Michael.C.Peterson@wad01.usace.army.mil]
Sent: Wednesday, July 28, 2004 1:37 PM
To:
Subject: Comment on Residuals Project

Dear Ms.

I received your comment regarding the Washington Aqueduct Proposed Residuals Management Process Environmental Impact Statement (EIS). Thank you for that comment.

Washington Aqueduct is under a mandate, driven by a Clean Water Act permit and a Federal Facilities Compliance Agreement with EPA, to change the manner in which we manage the water treatment residuals created in the process of treating Potomac River water to provide drinking water to the District of Columbia, Arlington County, and Falls Church.

Since you visited our project website you may have seen that there are three alternatives we are studying in detail to understand their potential impacts to the community and the environment. We started the process with 26 alternatives, most of which did not meet various screening criteria and were therefore "screened out". Based on the initial screening analysis, the three alternatives currently under detailed evaluation were determined to be feasible in terms of constructability, cost, reliability to the water treatment process, and compliance with the Clean Water Act and Federal Facilities Compliance Agreement. The three alternatives all include building mechanical dewatering facilities either at the Dalecarlia Water Treatment Plant or at the Blue Plains Wastewater Treatment Plant. In order to convey the residuals to Blue Plains, a set of pipelines are required from Dalecarlia to Blue Plains. Disposal of the dewatered residuals in these alternatives would be performed using either contract trucking to permitted land disposal facilities, or to a monofill located to the east of the Dalecarlia Reservoir. Each of the alternatives have drawbacks; we are working to fully understand these drawbacks. This understanding will help Washington Aqueduct to make a decision on the alternative to design and build. The Draft EIS, which will include the impacts analysis, is expected to be complete approximately in November 2004. Upon completion, it will become available to the public and there will be a public meeting and a formal public comment period.

You are not alone in your expression of opposition to the alternative that includes the construction of a monofill on the Dalecarlia Reservoir Grounds. I have received many similar comments from different members of the community. The comments and the sentiment that you and others have expressed will become part of the impacts analysis and it will be considered by the decision makers.

We are planning on having a public meeting at some point in September in order to explain the progress that has been made, and to show stakeholders visual simulations of different alternatives. This will also be an opportunity for stakeholders to directly ask questions. I will email you when this meeting is scheduled.

If you are interested in adding your address to our mailing list, please let me know. Also, please feel free to email me with any questions or additional comments that you might have.

Document #49

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Wednesday, September 22, 2004 10:19 AM
To: Peterson, Michael C
Cc: Schultz, Paula
Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments: Hi Mr. Peterson Looks like you're getting more static than you expected on this residuals project. My efforts to calm people down have been overwhelmed by the against-everything-activists. I don't know whether you ever saw the comments I sent to Tom Jacobus, but I will foward them if I can find a way to attach them to a future e-mail to you. But here is the reason for this message: COMMENT: I think you need a serious alternative that explores ways of not taking the crud out of the river upstream in the first place. It is, after all, the most sensible long-range solution. The quick answer was that you don't own enough (any?) land up there to do it. But maybe ways can be found... QUESTION: I'd like to go see where the inlet ducts are up river if you can tell me where they are and how to get there. Maybe I can think of something quirky. I am at (301) 229-6076 if you've got time to give me a call. Len Sullivan Overlook resident

49-1-KA

Name

Agency: Overlook Homeowners Assn

E-Mail Address

Telephone Number

Please Contact

Document #50

Peterson, Michael C WAD

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

Sent: Tuesday, September 21, 2004 4:17 PM

To: Peterson, Michael C

Cc: Schultz, Paula

Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments

Dear Mr. Jacobus, Dear Mr. Peterson, thank you for your presentation the other night and we look forward to the next one. in response to your letter inviting the affected neighbors to provide suggestions i am going to try. the city of Adeliade, Australia appears to be going forward with a system that does not generate residuals, i have attached the link below. Rather this design calls for the following(please note this is direct from their publication): · Treatment process - preferred process train is Magnetic Ion Exchange Process (MIEX®), microfiltration (immersed) and GAC filtration (in existing sand filters) utilising the existing infrastructure to the optimum degree Of note is the innovative treatment process combination which is unique and which represents the future direction for water treatment. · MIEX® - this process will remove the majority of DOC which is the major problem – causing parameter in Adelaide's source water · Microfiltration - MF will efficiently remove almost all particulates, including Cryptosporidum and Giardia · GAC filtration - with a much reduced organic load, will remove taste and odour, synthetic organic chemicals (SOC's) and generally 'polish' the water This process train has many advantages: · no chemicals are dosed into the water being treated (fluoride and chlorine will be added in low doses prior to distribution); · following on, no solid residuals (sludge) or dissolved residuals (aluminium, disinfection by-products, monomers) are formed. There are reject streams from the MIEX® process, and the microfiltration units and GAC will generate backwash streams but these are relatively minor; and · it can be retrofitted into the existing infrastructure more readily than other process combinations evaluated. In the opinion of SA Water the process 'train' discussed which is essentially chemical free, residual free and environmentally friendly is the future direction for water treatment. KEY WORDS water, organics, retrofit, MIEX®, microfiltration, ozone, GAC could this be an viable alternative? was it considered? thank you in advance

50-1-LA

Name

Agency

E-Mail Address

Telephone Number

Please Contact ContactRequested

Document #51

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Saturday, September 25, 2004 1:45 PM
To: Peterson, Michael C
Cc: Schultz, Paula
Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments	September 25, 2004 Mr. Thomas P. Jacobus Mr. Michael Peterson Your September 17 letter says that you will accept ideas for additional alternatives to be screened. Many people have been surprised that you have failed to include partial or total relocation among your 26 alternatives. Please consider, as an alternative for the current alternatives for the Water Treatment Residuals Management Project, the relocation of (1) some of, and (2) all of, the water treatment and sludge disposal facilities and functions to other sites. Your self-selected criteria have apparently excluded these alternatives. Nevertheless, this the public is entitled to know what such obvious alternatives would entail. Whether or not you recommend relocation or consider it too expensive compared with the temporary sludge dump, I believe it must at least be considered. Thank you,

51-1-BB

Name	
Agency	
E-Mail Address	
Telephone Number	
Please Contact	ContactRequested

Document #52

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Wednesday, September 08, 2004 10:10 AM
To: Peterson, Michael C
Cc: Schultz, Paula
Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments	I was very disappointed in the format of the public meeting last night. You clearly did not want to hear the comments of interested citizens and neighbors. I also note that you said you didn't expect as many people as arrived. However, your own security and gate guards said as we arrived that you were expecting 200 people. I want to make clear that I totally oppose the monofill project and the clear cutting of all those beautiful trees and forest. I think it is a dangerous, short term proposal that would be costly and detrimental to all the surrounding residential neighborhoods. I can't even believe that you are considering it at all. I will work hard to stop that proposal.
Name	
Agency	
E-Mail Address	
Telephone Number	
Please Contact	ContactRequested

52-1-NC, IA

Document #53

Peterson, Michael C WAD

From:
Sent: Wednesday, September 22, 2004 6:01 PM
To: Thomas P. Jacobus; Michael C. Peterson; Patricia A. Gamby
Subject: SSS-ANC - Needed Analysis for Next Public Review

Hello Tom Jacobus --

What a frustrating public meeting for you the recent gathering at the Aqueduct must have been! Your briefings and materials for us on the ANC-3D have been clear and effective.

Here is the analysis I would like to have and that I think would greatly advance public review in the next stage. Focus on your three preferred options (with perhaps some sharpening of the rationales side by side). Then outline the financial aspect. We really are quite ignorant of this, the whole process. It does not answer to say that ratepayers will bear the burden, although even that comes as a surprise to many. What are the financial instruments? And how are they secured and staged? All of which leads up to the climax, namely, the impact of the three options. My position, as of now, is that we should go for the $90M permanent solution directly. But without financial material I cannot really advocate this in public, which I would like to do. It seems to me that the other two options are 20-year fixes at not substantially less than the permanent fix. I believe this would be persuasive. Also, correct me if I am wrong in this, I believe the permanent fix approach could still use advances in chemical or biological treatment technology, for which we all devoutly pray.

-- Let me know how you can proceed with this and how I can help.
Glad to serve as your lay audience guinea piglet. -- Thanks,

53-1-IA

Advisory Neighborhood Commissioner 3D-02 Advisory Neighborhood Commission 3D, Secretary

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Document #54

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Saturday, September 25, 2004 2:39 PM
To: Peterson, Michael C
Cc: Schultz, Paula
Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments	September 25, 2004 Dear Mr. Jacobus: At the September 7 meeting, you said that it was not POSSIBLE to calculate the maximum height of the proposed sludge dump or the maximum acreage to be clearcut. That seemed incredible; do you simply want a blank check? Does your answer mean, for example, that the actual height might be 90', or 100', or even more? Similarly, what does a 30-acre
Name	
Agency	
E-Mail Address	
Telephone Number	
Please Contact	ContactRequested

54-1-CC

Document #55

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Monday, October 04, 2004 8:39 AM
To: Peterson, Michael C
Cc: Schultz, Paula
Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments	October 4,2004 Mr. Jacobus -- On September 25, I sent two letters with questions about your proposals. Did you receive them? Also, when can I expect a reply. Thank you,
Name	
Agency	
E-Mail Address	
Telephone Number	
Please Contact	ContactRequested

55-1-IA

contact information

Document #56

Peterson, Michael C WAD

From:

Sent: Tuesday, October 19, 2004 2:06 PM

To: Peterson, Michael C WAD

Subject: RE: Residuals project question

Dear Mr Peterson,

Thank you, your answer does answer my doubts.

Regards,

-----Original Message-----
From: Peterson, Michael C WAD [mailto:Michael.C.Peterson@wad01.usace.army.mil]
Sent: Tuesday, October 19, 2004 11:19 AM
To:
Subject: RE: Residuals project question

I apologize for the delay in responding to your question. I only have a partial answer to your questions at this point; I will follow up later with the complete answer.

The estimated cost for the pair of 12-IN pipelines in alternative 8 is $29.5 Million. Of the $29.5 Million, $10 Million is required for land acquisition costs. These costs would not be applicable in alternative 5 because WASA already owns the land at Blue Plains (at presumably would not charge Washington Aqueduct for the property), and it was assumed that there would not be a cost associated with the real estate along the pipeline route due to the assumed existing and available right-of-way. Therefore, in order to compare the pipeline construction costs between alternatives 8 and 5, the cost of the land acquisition should be subtracted. Without the land acquisition costs, the estimated construction cost would then be $19.5 Million for the pipeline in alternative 8. This still is not the same cost per mile as in alternative 5 ($13.4 Million), a difference of $6.1 Million. Our consultant is working on getting me a detailed explanation for the difference between the two. However, the difference is probably attributable to the assumed differences in land use along the pipeline routes for the two alternatives. Alternative 8, I think, was assumed to be more urban, which would result in more utility crossings and other complications. However, when I receive the detailed answer from the consultant, I will give you their answer.

In alternative 5 (aka alternative c), the concept was to have 100% redundancy - namely two 12-IN pipelines.

I hope that this will at least partially answers your question. Please let me know if you have any additional questions.

56-1-IA

MICHAEL C. PETERSON
Environmental Engineer
Washington Aqueduct
5900 MacArthur Boulevard, NW
Washington, DC 20016-2514
michael.c.peterson@usace.army.mil
Phone: 202-764-0025
Fax: 202-764-1823

-----Original Message-----
From:
Sent: Wednesday, September 29, 2004 10:27 PM

contact information

To: Peterson, Michael C WAD
Subject: Residuals project question

Michael,

I am trying to understand the three chosen alternatives a little better, hoping that by understanding these I could perhaps come up with some possible new ideas that are feasible, at least in principle. Could you please help by providing some insight into the following questions?

- There are two places in the Engineering Feasibility Study (EFS) where you estimate the cost of a pipeline. One is, of course, in the cost estimate for the pipeline to Blue Plains. On page 5-4 of the EFS the cost of building this 13 mile, 12 inch pipeline is estimated at approximately 13.4 million dollars -- roughly 1 million dollars per mile of pipeline. The second place where you estimate the cost of a pipeline is where you estimate the cost of the pipeline for Alternative 8, on page 3-23 of the EFS. Here, a 10 mile, 12 inch pipeline is estimated at 30 million dollars -- 3.0 million dollars per mile. This is 300% of the cost of the Blue Plains Pipeline. Could you explain what drives this difference in cost?

- You are using a diameter of 12 inches for the pipeline to Blue Plains. Based on your calculation on page 3-19 of the EFS I understand that a single 12 inch pipeline by itself is enough to convey the maximum estimated volume of 1.15 mgd of thickened residuals shown in table 3-3. Are you going to use 100% redundancy and build a dual 12" pipeline, or are you just building a single 12" pipeline? If you are doing the latter, why wasn't redundancy needed?

Thanks in advance for your help,

-----Original Message-----
From: Peterson, Michael C WAD [mailto:Michael.C.Peterson@wad01.usace.army.mil]
Sent: Monday, August 30, 2004 10:02 AM
To:
Subject: contact information

Please do not hesitate to contact me if you have any questions.

Very Respectfully,

MICHAEL C. PETERSON
Environmental Engineer
Washington Aqueduct
5900 MacArthur Boulevard, NW
Washington, DC 20016-2514
michael.c.peterson@usace.army.mil
Phone: 202-764-0025
Fax: 202-764-1823

Document #57

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Sunday, November 07, 2004 10:30 PM
To: Peterson, Michael C WAD
Cc: Schultz, Paula NAB02
Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments

Dear Dr. Peterson: Thank you for the opportunity to comment on the ACE's efforts to address the water treatment waste near the Dalecarlia property. We are writing to express our strong opposition to the option of building a monofill on the Decarlia property; this increases truck traffic, congestion, and unnecessarily degrades and devalues the surrounding federally protected natural lands which are scarce in Washington DC. Instead, we respectfully request that ACE proceeds with the options that do not require additional new facilities at Decarlia but instead build pipes that will bring the necessary waste to Blue Plains which already exists for the purpose of treating such waste. This will minimalize the unnecessary taxing of natural resources and road congestion. Thank you for taking our request in consideration. Please do not hesitate to contact us should there be any questions or further comments we may provide. Sincerely,

57-1-IA

Name

Agency

E-Mail Address

Telephone Number

Please Contact ContactRequested

Document #58

Peterson, Michael C WAD

From: WWW [www@wfpub.usace.army.mil]
Sent: Tuesday, November 09, 2004 11:37 AM
To: Peterson, Michael C WAD
Cc: Schultz, Paula NAB02
Subject: Comments on Proposed Water Treatment Residuals Management Process

Specific Comments	Under what law or regulation is it forbidden to return the silt removed from Potomac River water to the river from which it came? This would seem a natural and environmentally neutral procedure as well as more economical and less disruptive. Could not the provisions preventing this approach be challenged or changed?
Name	
Agency	Spring Valley-Wesley Heights Citizens Association
E-Mail Address	
Telephone Number	
Please Contact	

58-1-JA

Document #59

CONCERNED NEIGHBORS
Bethesda, MD
Washington, D.C.

March 30, 2005

VIA HAND DELIVERY

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' NEPA Analysis of Alternatives to the Current Residuals Disposal Practices at the Washington Aqueduct

Dear Mr. Jacobus:

As promised in our comments delivered to you on February 14, 2005, we are providing these supplemental legal comments to remind the Army Corps of Engineers/Washington Aqueduct ("Corps") of the fatal flaws in its current environmental impact analysis and to beseech the Corps to begin the process anew as required by the National Environmental Policy Act ("NEPA"). The flaws in the Corps' process and analysis cannot be corrected mid-stream and therefore require that the process be re-started.

These comments are being submitted to you 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.[1]

[1] 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.

We will show in the following pages that the Corps has violated NEPA by establishing an unduly narrow "purpose and need' for the project,[2] and by applying unduly narrow screening criteria"[3] during its evaluation of "reasonable alternatives", with the end result being that the Corps has eliminated virtually every alternative to the current practice of disposing the water treatment residuals into the Potomac River.

We will also show that the current NEPA decision making process is a sham. A closer examination of the record reveals that the Corps has already determined that construction of an industrial dewatering facility and trucking of water treatment residuals from Dalecarlia through the surrounding residential neighborhoods is the "preferred" alternative. In fact, trucking has been the Corps' preferred alternative for more than 10 years. Despite the fact that it has had more than 10 years to evaluate alternatives, the Corps has not looked broadly at a reasonable range of alternatives. The Corps has only pretended to look at some alternatives, knowing that these other alternatives are not feasible. The Corps has been able to do so by inconsistently applying its own unduly narrow screening criteria,[4] thereby allowing 2 of the 3 "alternatives" - the Dump[5] and Blue Plains[6] - to remain on the table as "reasonable alternatives" even though the Corps clearly knows that neither alternative is feasible. The Corps has at the same time prematurely and unreasonably rejected a number of feasible alternatives suggested by the community, as discussed in section II.B below. The Corps must take a "hard look" at these other alternatives, particularly the piping alternatives.

Finally, we will show that the Corps has repeatedly failed to follow the strict procedural requirements of NEPA. The NEPA process is designed to ensure that the Corps will be fully informed of the environmental consequences of its actions *before* it engages in a major federal action significantly impacting the environment.[7] NEPA accomplishes its objectives by "impos[ing] a [strict] procedural requirement that an agency must contemplate the environmental impacts of its actions."[8] The Corps' failure to adhere to proper NEPA procedures demonstrates its intent to eliminate reasonable alternatives from consideration in furtherance of promoting trucking of the residuals from Dalecarlia as the *only* reasonable alternative. The Corps has not genuinely sought the public's input and has not meaningfully involved the communities that would be most directly impacted by the alternatives. The Corps has not shared critical documents

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[2] 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.

[3] 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. Draft Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process, Presentation from January 28, 2004 Meeting, p. 6, and presentation slides from the May 26, 2004 meeting, p. 11.

[4] *Id.*

[5] The Dump is the 80 foot tall, 30 acre monofill that the Corps has proposed constructing on the Dalecarlia Reservoir grounds.

[6] The Blue Plains alternative would involve piping the residuals to the Blue Plains facility, but the Corps has publicly acknowledged that Blue Plains does not have the necessary capacity to handle these residuals.

[7] *See Wyoming v. United States Dept. of Agriculture*, 277 F. Supp. 2d 1197 (D. Wy. 2003).

[8] *League of Wilderness Defenders – Blue Mountains Biodiversity Project v. United States Forest Serv.*, No. Civ. 04-488-HA, 2004 WL 2642705 at *3 (D. Or. Nov. 19, 2004) (citation omitted).

with the community at critical times so that they can offer informed input into the decision making process. The Corps cannot retroactively correct these failures now by informing the public about where it stands in the decision making process. The public has a right to engage in a meaningful dialogue with the Corps about a reasonable range of alternatives, not simply to be lectured to about the Corps' lack of time to consider a broader range of alternatives. As a result, this flawed process must be restarted on a clean slate.

I. Background.

A. The Corps Has Been Studying Alternatives to the Current Water Residuals Treatment Process Since at Least 1995.

The Corps has had more than a decade to evaluate alternatives to its current practice of discharging water treatment residuals into the Potomac River during periods of high river flow and turbidity. During the early 1990s, the Corps was allowed to discharge residuals into the Potomac River in accordance with the provisions of an NPDES permit effective from May 3, 1989 through May 2, 1994. The Corps formally applied for renewal of this NPDES permit in December 1993.[9] The Corps first began to examine alternative disposal plans upon learning *in 1994* that "future discharges [into the river] would not be allowed" under the renewed permit.[10]

The EPA was prepared to issue a new permit in 2002 with essentially the same discharge limits as before. However, in response to a lawsuit filed by the National Wilderness Institute ("NWI"),[11] the NPDES permit was revised and reissued in 2003 with discharge limits that "significantly reduced the allowable concentration of residuals that may be discharged."[12] The new permit became effective on April 15, 2003. Because the permit did not contain any deadlines for compliance, the Corps and EPA Region III entered into a Federal Facilities Compliance Agreement ("FFCA") on June 12, 2003, to specify compliance goals.[13] The FFCA's "compliance program" includes a schedule for delivering documentation, completing an alternatives evaluation and disposal study, conducting an analysis of engineering options, and achieving compliance with the NPDES permit.[14]

B. Current Law and EPA Regulations Do Not Prohibit Discharges of Water Treatment Residuals into Rivers.

Current law and EPA regulations do not prohibit the discharges into the Potomac River. The zero discharge requirement in the current NPDES permit is not legally mandated. As EPA recently

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[9] Declaration of Thomas P. Jacobus ("Jacobus Decl.") ¶ 14, Attachment 1. (This declaration relates to the National Wilderness Institute case against the Army Corps of Engineers and was obtained through a FOIA request to the EPA.)

[10] Jacobus Decl. ¶¶ 15-16, Attachment 1 (citing to a memorandum written by Mr. M.C. Peterson, Chief of Planning and Engineering Branch of Washington Aqueduct).

[11] *National Wilderness Institute v. Army Corps of Engineers*, Case No. 01-0273.

[12] *Alternatives Analysis Submitted in Fulfillment of the Federal Facilities Compliance Agreement*, dated December 2004 (the "December 2004 Report"), p. 1-1.

[13] EPA and the Corps entered the FFCA to set a compliance schedule because "a compliance schedule may not be included in the NPDES Permit." Letter from William Hoffman to Amy Edwards dated November 30, 2004, p.1, Attachment 2.

[14] December 2004 Report, p. 1-2; FFCA, ¶¶ 19-29.

confirmed in a September 2004 *Federal Register* notice, no current EPA effluent guidelines prohibit the discharge of water treatment residuals into rivers.[15] "EPA did not identify the Drinking Water Supply and Treatment Industrial sector (SIC Code 4941) as a potential candidate for effluent guidelines development in the preliminary Plan. . . . Therefore, EPA has decided to identify the drinking water supply and treatment industry sector in this final Plan and to complete an effluent guidelines rulemaking for this industry within three years."[16] In other words, EPA is considering *initiating* a rulemaking proceeding to determine whether such guidelines should be developed over the next 3 years.

59-1-AD

C. The Corps and EPA Have Previously Acknowledged that It Will Take Time to Design and Build, and Creative Financing to Pay for, the Construction of New Treatment Facilities.

The Corps has previously acknowledged that it will take time to design and build new treatment facilities. The Corps and EPA have has also acknowledged that there will be a need for creative financing to pay for the construction of these new facilities. For these reasons, the deadlines in the FFCA and the need to minimize the impact upon ratepayers cannot be used as mandatory criteria for eliminating a broad range of potentially feasible alternatives.

The Corps previously estimated that it would take six years to complete the project: one year to evaluate the alternatives, two years to design the project, and three years[17] to construct the facilities.[18] The FFCA does not, nor should it require that deadlines be cast in stone. Both the EPA and the Corps acknowledged in the FFCA that there may be times where modifications of the schedule are warranted. For example, the FFCA allows for:

- modifications to the FFCA when timely made and for good cause;[19]
- modifications as agreed upon by the parties.[20]

The FFCA and the NPDES Permit both recognize that the NPDES Permit could also be modified.[21] At the time when this agreement was being negotiated, other agencies observed "that the FFCA does not commit Corps to a firm schedule for compliance."[22]

The EPA has also previously acknowledged that the Corps may need to employ creative funding to pay for the construction of new treatment facilities. "Due to a ruling by the OMB, the Corps of

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[15] Notice of Availability of 2004 Effluent Guidelines Program Plan, 69 Fed. Reg. 53705 (Sept. 2, 2004).
[16] 69 Fed. Reg. 53705, 53720 (Sept. 2, 2004).
[17] Bill Bulman even stated that 3 1/2 to 4 years "seems too optimistic, unless the plans and specifications are already complete." Outline Review of the *1995 Residuals Disposal Study*, from Bill Bulman, dated August 7, 1996, p. 5, Attachment 3.
[18] *Schedule*, Presentation at May 26, 2004 public meeting, p. 33; *see* Letter from Paul Hoff to David Arent dated April 15, 2003, Attachment 4; *1996 Design Memorandum,* vol. 1, p. ES-6 ("Construction has been estimated to take 36 months and potentially longer if the work commences in the late fall/early winter season.").
[19] FFCA ¶¶ 37-46.
[20] FFCA ¶ 57 ("Terms and conditions of this Agreement *changed by an agreed upon modification* shall be enforceable as changed.") (emphasis added).
[21] FFCA ¶ 53; NPDES Permit §A.12 ("Reopener Clause for permits").
[22] Letter from Paul Hoff to David Arent dated April 15, 2003, Attachment 4.

Engineers construction of the treatment facilities *must be funded by a congressional appropriation*, rather than out of their budget. Without an appropriation, the customers may have to pay for the construction on a 'pay as you go basis' if they are not able to borrow the money."[23] The *1996 Design Memorandum* indicates that amounts budgeted for the project through 1999 did not include final design or construction funding.[24] By stating that "[t]he Corps agree[d] to use every available mechanism to seek sufficient funding", the FFCA implies that the Corps may need to seek funding from alternate sources.[25] The Water Management Division of EPA also indicated that the method of funding could be discussed during the FFCA negotiations.[26] Minimizing the impact upon ratepayers cannot be a basis for eliminating otherwise reasonable alternatives, particularly where the Corps has completely failed to explore alternative sources of funding.

59-2-ND

D. The Corps Cannot Trump the Strict Procedural Requirements of the Federal NEPA by Voluntarily Entering Into a Contractual Agreement.

The Corps may not restrict its analysis of "reasonable alternatives" to that narrow range of alternatives that satisfy the strict deadlines, minimal cost impact and other conditions contained in the FFCA. The Corps must consider *all* reasonable alternatives that would accomplish the "underlying purpose and need" of the proposed action,[27] *i.e.* evaluating alternatives to the current river discharge practices. A number of the alternative piping options suggested by the community satisfy the underlying purpose and need of the project.

NEPA "demand[s] exploration of alternatives free of contractual arrangements. The public interest in the environment cannot be limited by private agreements."[28] The Corps cannot avoid its NEPA obligations by using a contract that it voluntarily entered into as a *screening* criteria by which it can then eliminate its obligation to examine a reasonable range of alternatives. If this were so, every federal agency could enter into contracts with third parties to avoid the requirements of NEPA. Congress certainly did not intend such a Catch 22 situation to be acceptable. Nor can the Corps mislead the public by calling this voluntarily entered obligation, which on its face acknowledges the parties' ability to renegotiate the deadlines contained therein, a "legally mandated schedule."[29]

EPA and the Corps entered the FFCA to set a compliance schedule because "a compliance schedule may not be included in the NPDES Permit."[30] The deadlines in the FFCA were intended to be compliance *goals* (the Corps was to use its "best efforts" to comply with these dates), not a noose around the Corps' neck that would excuse it from proper compliance with NEPA. The Corps eliminated a number of the original alternatives based on alleged non-

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[23] Water Management Division Fact Sheet (undated), p.2 (emphasis added), Attachment 5 (this document was obtained through the EPA's response to a FOIA request).
[24] *1996 Design Memorandum*, vol. 1, p. 1-3.
[25] FFCA ¶ 54.
[26] Water Management Division Fact Sheet (undated), p. 2, Attachment 5.
[27] *See Simmons v. United States Army Corps of Eng'rs*, 120 F.3d 664, 670 (7th Cir. 1997).
[28] *Simmons* at 669.
[29] *See* Letter from Thomas Jacobus dated September 10, 2004, Attachment 6.
[30] Letter from William Hoffman to Amy Edwards dated November 30, 2004, p.1, Attachment 2.

compliance with the FFCA schedule. However, the FFCA language allows for modifications to the schedule. For example, the FFCA provides for:

- flexibility with timelines where disputes arise;[31]
- modifications as agreed upon by the parties.[32]

Both the FFCA and the NPDES Permit recognize that the NPDES Permit may be modified through appeal.[33] Further, the parties agree to negotiate modifications to the FFCA to comply with discharge limitations in the final NPDES Permit. Agency concerns "that the FFCA does not commit the Corps to a firm schedule for compliance"[34] also demonstrate the flexibility of the schedule.

Even a reasonable alternative that is "*outside the legal jurisdiction of the lead agency* must still be analyzed in the EIS if it is reasonable."[35] The Corps recognized that "[t]he final alternative selected may be contingent on authorization, approvals, or issuance of permits or easements by various public agencies or private entities...", yet claims that the FFCA and NPDES Permit automatically preclude consideration of dozens of alternatives.[36] In other words, the Corps is required to evaluate, *inter alia*, alternatives that do not meet the deadlines or any other condition contained in the FFCA.

As explained in CEQ guidance, "[a] potential conflict with local or federal law does not necessarily render an alternative unreasonable, although such conflicts must be considered."[37] While the court will give deference to the lead agency as to what constitutes a reasonable range of alternatives, these alternatives still need to be included in an "evaluation of alternative means to accomplish the general goal of an action."[38] In this case, that goal must be to find a disposal option for the Washington Aqueduct residuals that has minimal adverse impacts upon the environment, not simply to find an option that meets the voluntary schedule set forth in the FFCA.[39]

The Corps' elimination of dozens of reasonable alternatives based on the deadlines and other conditions contained in the FFCA and NPDES permit does not comport with its obligation under NEPA to evaluate the environmental impacts of a range of reasonable alternatives and to find a preferred alternative that has minimal adverse environmental impacts. The Corps simply cannot state that the only goal of the EIS is to "comply with [the] permit"[40] when the regulations clearly

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[31] FFCA ¶¶ 37-46.
[32] FFCA ¶ 57 ("Terms and conditions of this Agreement *changed by an agreed upon modification* shall be enforceable as changed.") (emphasis added).
[33] FFCA ¶ 53; NPDES Permit §A.12 ("Reopener Clause for permits").
[34] Letter from Paul Hoff to David Arent dated April 15, 2003, Attachment 4.
[35] CEQ 40 Most Frequently Asked Questions ("40 Most FAQs"), 2b.
[36] *See Engineering Feasibility Study* § 1.2, CH2MHILL, May 2004; December 2004 Report, ¶ ___.
[37] CEQ 40 Most FAQ, 2b.
[38] *Simmons*, 120 F.3d at 669.
[39] The Corps acknowledged this goal in its plan of action, to "[i]dentify the alternative that best balances potential impacts on the environment, on neighbors, and on operations of the water treatment plants." *New Alternatives/Options Suggested by Stakeholders,* Presentation from November 16, 2004 public meeting, last page.
[40] *See* Letter from Amy Edwards to Jon Capacasa dated October 22, 2004, with handwritten notes of EPA on p. 6 (attached to letter from William Hoffman to Amy Edwards dated November 30, 2004), Attachment 7.

state that the purpose of the EIS is to "provide full and fair discussion of *significant environmental impacts* and shall *inform* decisionmakers and the public of the *reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.* Agencies shall focus on significant environmental issues and alternatives. . . . "[41]

59-3-ND

II. The Corps Needs to Expand the Range of Reasonable Alternatives under Consideration in the DEIS.

A. The Corps Has Engaged in a Sham Process.

In its haste to select an alternative that will satisfy the short time frames and other conditions set forth in the FFCA, it is clear that the Corps is going through the motions of pretending to comply with NEPA, but that it has already made up its mind about which alternative will ultimately be considered "preferred". The Corps eliminated three of the four "alternatives" as early as May of 2004. That leaves only one alternative on the table for detailed evaluation during the DEIS process. The Corps improperly established an unduly narrow "purpose and need" with only one possible outcome, constructing an on-site dewatering facility and trucking the residuals from Dalecarlia through residential neighborhoods. Its unduly narrow purpose and need statement, and narrow objectives, has foreclosed any serious consideration of truly reasonable alternatives. The lack of reasonable alternatives at this stage in the process, *before the DEIS has even been issued*, proves that the Corps is merely going through the motions of the NEPA process in order to promote the only alternative the Corps seeks to implement. The Corps cannot continue this charade but must rigorously examine other alternatives, including piping the residuals to locations other than Blue Plains.

For example, 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 permit" and that "the [Corps was] looking at on-site dewatering and trucking for disposal of sludge as the primary alternative."[42] Ironically, this announcement occurred six days prior to the "first public forum" held by the Corps.[43] At a minimum, the Corps had predetermined that trucking was the preferred alternative before it ever held a "public forum to discuss the alternatives that would be evaluated in detail in the DEIS."[44]

1. Dewatering and Trucking From Dalecarlia Have 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.[45] For example, the *1996 Design Memorandum* demonstrates this preference: "*The* alternative chosen for study gives the best analysis of an option that processes solids at the Dalecarlia site and removes them over land with

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[41] 40 C.F.R. § 1502.1. (emphasis added)
[42] Meeting Minutes, District of Columbia Water and Sewer Authority Board of Directors, Environmental Quality and Operations Committee Meeting, dated May 20, 2004, p.1, Attachment 8.
[43] *See* December 2004 Report, p. 4-2.
[44] *See* December 2004 Report, p. 4-2.
[45] *1996 Design Memorandum* p. ES-3.

trucks."[46] Little has changed in the ensuing ten years. When approached at the September 7, 2004 public meeting, the Corps stated that the "technology [Corps] anticipate[s] having at the end of 20 years is the trucking option."[47] 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."[48] 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.[49]

It is clear that the Corps has pre-selected trucking from Dalecarlia as the preferred alternative[50] and only maintains the Blue Plains and the Dump alternatives as part of the current 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*.[51] 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."[52] During the November 16, 2004 public meeting, the Corps confirmed that space is *not available* at Blue Plains, yet this alternative mysteriously remains "reasonable" over other more feasible alternatives. This simply does not make sense.

2. The Corps Needs to Completely Eliminate the Dump from the DEIS Because It Clearly is Not a Reasonable Alternative.

The fact that the Corps has engaged in a sham process is evident from its continued, stubborn inclusion of the Dump[53] as a reasonable alternative. 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.[54] Even though the Corps has admitted that the Dump alternative cannot be selected,[55] we

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[46] *1996 Design Memorandum*, pp. ES-3, 4-1 (emphasis added).
[47] *See* Oral Statements from the September 7, 2004 public meeting, 14:1-6.
[48] *Emerging Issues,* Presentation from September 28, 2004 Meeting, p. 7.
[49] *See* Appendix for discussion of problems of trucking recognized by the Corps.
[50] *See 1995 Residuals Disposal Study*, p. 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 dated September 1, 2004, question 5, Attachment 9 (stating that the monofill will be evaluated "as an alternative to trucking".)
[51] *1995 Residuals Disposal Study*, vol. 1, p. 7-26; *see* Outline Review of the *Residuals Disposal Study*, by Bill Bulman, dated August 7, 1996, pp. 3 to 5, Attachment 3.
[52] Meeting Minutes, District of Columbia Water and Sewer Authority Board of Directors, Environmental Quality and Operations Committee Meeting, dated October 29, 2004, Attachment10.
[53] 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.
[54] *See* Comments submitted by Concerned Citizens, dated February 14, 2005, Tab 3 (*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.* Richard D. Albright. ("Albright Report")).
[55] *Emerging Issues,* Presentation from November 16, 2004 public meeting, p. 3 ("Spring Valley Schedule and FFCA deadlines preclude Alternative A from being selected.").

offer our comments why the Dump is not a reasonable alternative and should be eliminated from the DEIS completely.

a. DC 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.

The proposal to build the Dalecarlia Monofill occupies approximately 30 acres and ranges from 50 to 80 feet high. The 30 acres occupies the area historically known as "government woods" where a private civil war relics collector unearthed approximately 50 artillery shells from a burial pit around 1984. Richard Albright of the District of Columbia's Environmental Health Administration has written an 80+ page report on the ongoing Spring Valley munitions investigation.[56] Albright's report indicates that a significant volume of chemical and high explosive munitions may be buried on the Reservoir grounds in the area where the Dump would be located.[57] This possibility makes a Dump near the Reservoir not feasible for health and safety reasons. "A narrow gauge railroad was completed on the campus of AUES [American University Experiment Station and Range], one month before the site was closed. . . It is thus plausible that the railroad track, which originated at the AUES, was extended all the way to the Dalecarlia property to dispose of the vast quantities of material on hand at AUES . . . A high level of thallium was found on the Reservoir property and on AU. Elevated arsenic has also been detected on the Reservoir property."[58] Mr. Albright goes on to recommend that future necessary work at the Spring Valley Site include a geophysical survey of the Dalecarlia Reservoir impact and burial areas and excavation of all anomalies.[59]

The Albright report reflects the very serious concern that a substantial volume of chemical and high explosive munitions are likely to have been dumped and/or buried in the woods. The report states:

> The relic hunter stated to EPA and myself that he found an anomaly approximately 10 foot by 10 foot. He further stated that the anomaly was comprised of individual shells but that they were so dense as to make it impossible to separate out the individual shells even with a VHF detector with an average search coil. . . I have conducted a geophysical search of nearly all of the area between Dalecarlia Parkway and the road around the Reservoir. I had previously located narrow gauge railroad spikes near the fence and I identified the 5 remaining shells as 75mm shells consistent with those of the Spring Valley era. Finally, the burial pit and rail bed is just south of a large impact area in which I have found numerous pieces of frag.[60]

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[56] *See* Albright Report.
[57] *See generally id.*
[58] *Id.*, at 31-32.
[59] *Id.*, at 72.
[60] Albright Report, p. 41.

> I and my partner at the time, Greg Hope, had previously located an impact area in the Dalecarlia property and recovered shrapnel balls and numerous pieces of frag from Stokes mortars. I also found frag from 75mm shells, suggesting that there was another firing point. I flagged approximately 60 larger anomalies compatible with shells. . . Later I learned that the FUDS boundary was drawn where it was at the request of the Washington Aqueduct, because they did not want the District's major water reservoir associated with the AUES and questions raised about the quality of the drinking water. However, I had previously examined that issue and found that the creeks draining Spring Valley had been diverted around the reservoir in 1905, long before AUES.[61]
>
> A resident of Spring Valley also told DOH that he found a live fuze in Dalecarlia as a kid and that his father called the police who confirmed that it was live and took it away.[62]
>
> Still photographs show the Livens battery ballistically firing shells in the direction of Dalecarlia, which is within range of the livens battery. Also, a live Livens shell was found outside the fenced perimeter of Dalecarlia.[63]

Despite the Corps' knowledge of the potential burial of munitions before beginning the NEPA process, the Corps still considers the Dump to be a "reasonable" alternative. 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.

b. The Corps Ranked the Dump Low in the Earlier Studies Before The Corps Learned of the Serious Munitions Problem.

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."[64] 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. This simply does not make sense. Even without the munitions issue, the Dump is not a reasonable alternative and should never have survived the screening process.

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[61] *Id.*, p. 47.
[62] *Id.*
[63] *Id.*, p. 77.
[64] *1995 Residuals Disposal Study*, Exhibit 7-16 (indicating that the Monofill option earned the most points and was the least desirable alternative).

c. Other Environmental Reasons Demonstrate Why the Dump is Not a Feasible Alternative.

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.[65] 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.

The Corps must also rigorously examine the impact of clear-cutting 30 acres on any "special" trees, as defined in the District of Columbia Urban Forest Preservation Act of 2002,[66] and the impact of cutting these trees on the environment, especially on the air quality in the region. The Corps must also account for the time and costs incurred to obtain any permits for removal of "special" trees.[67] If the Corps insists on continuing to pursue this alternative, it must conduct an inventory to assure that no "special" trees would be affected to comply with the purpose of the urban forest preservation program.

3. The Corps Must Consider the No Action Alternative as a Serious Alternative and Evaluate the Environmental Impacts of Continuing Current Disposal Practices.

The only other alternative that is under consideration is the "no action" alternative, which the Corps has stated is a "non-starter" because it would violate the NPDES permit, the FFCA, and the Clean Water Act.[68] The "no action" alternative is a serious alternative that cannot be summarily rejected because it is inconsistent with the NPDES permit and the FFCA. "[E]ven if an alternative requires 'legislative action', this fact 'does not automatically justify excluding it from and EIS.'"[69] 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

> . . . it 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

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[65] *See* Washington Aqueduct Residuals FAQs from Washington Aqueduct website, question 13.
[66] 50 D.C. Reg. 888 (January 22, 2003).
[67] *See* 24 D.C. Reg. 3700 *et seq.* (Jan. 21, 2005).
[68] December 2004 Report, p. 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 do not allow for such a discharge.
[69] *Northwest Coalition for Alternatives to Pesticides v. Lyng*, 844 F.2d 588, 592 (9th Cir. 1988).

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).[70]

The December 2004 report demonstrates that the Corps has already eliminated the "no action" alternative from further consideration, in blatant violation of the requirements of NEPA. The Corps states 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 they 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."[71] 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. NEPA requires this analysis to establish the baseline for comparing the environmental impacts of the agency's actions.[72]

4. 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.

The Corps has inconsistently applied its own unduly narrow screening criteria. If the Corps had consistently applied its own screening criteria, it would have realized that *all* of the alternatives would have been eliminated under its 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. The Corps inconsistently applied the screening criteria and included the Dump and the Blue Plains alternatives in the current evaluation in order to maintain an appearance of compliance with NEPA.[73]

Although the Corps apparently presented certain screening criteria at the January 28, 2004 public meeting, at which only 15 people were present, there was no explanation of the criteria or how they would be applied. Later, at the May 26, 2004 public meeting, the Corps merely presented the four alternatives surviving this mysterious application of the screening criteria without explaining which criteria forced elimination of 23 other alternatives that had apparently been under consideration at one time. At the September 28, 2004 public meeting, the Corps revealed the "reasons for elimination" for each of the original alternatives, but merely listed each screening criteria not met without further explanation.[74] The Corps finally explained the

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[70] Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18026 (March 23, 1981) (emphasis added).

[71] December 2004 Report, p. 3-5.

[72] *See League of Wilderness Defenders – Blue Mountains Biodiversity Project v. United States Forest Serv.*, No. Civ. 04-488-HA, 2004 WL 2642705 at *3 (D. Or. Nov. 19, 2004) (citation omitted).

[73] *1995 Residuals Disposal Study*, vol. 1, p. 7-26; *see* Outline Review of the *1995 Residuals Disposal Study*, by Bill Bulman, dated August 7, 1996, pp. 3 to 5, Attachment 3 (indicating that in 1995, the Corps eliminated both the Blue Plains and Dump alternatives from further consideration).

[74] *See Alternatives Screening Results,* Presentation from September 28, 2004 public meeting.

application of the screening criteria in a report dated December 2004, well after the scoping period had ended.[75] The Corps did not explain the nature or application of the criteria until December 2004 and never sought public input in developing the criteria in the first place.

The record demonstrates that the Blue Plains option was deemed "unacceptable" 10 years ago.[76] 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.[77] The Corps has not explained what has changed in the interim to suddenly 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 incredulous that this alternative remains on the table while the Corps has 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.[78] Absent the arbitrary deadlines established in the FFCA, *see infra*, 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.[79] Accordingly, the alternatives that were prematurely eliminated on the basis of cost should be retained for analysis during the DEIS.

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 timeframe "allows time for future technology development."[80] 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.[81] 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 on the basis that it was not a proven method, and it eliminated alternatives recommending movement of the intake structure on the basis that these alternatives would only provide a partial solution to the problem. 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

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[75] *See* December 2004 Report.
[76] *See 1995 Residuals Disposal Study.*
[77] Meeting Minutes, District of Columbia Water and Sewer Authority Board of Directors, Environmental Quality and Operations Committee Meeting, dated September 16, 2004, p. 2.
[78] *Alternative Screening Results*, Presentation from September 28, 2004 meeting, p. 9.
[79] *See* Washington Aqueduct Residuals FAQs from Washington Aqueduct website, question 27.
[80] Presentation from September 7, 2004 public meeting, p. 3.
[81] *Emerging Issues Presentation,* Presentation from September 28, 2004 Meeting, p. 7.

eliminated alternatives including all piping alternatives,[82] barging,[83] moving the Water Treatment Plant upriver,[84] and relocating or redesigning the water intake structure.[85] The Corps' inconsistent application of even its own unduly narrow screening criteria is unacceptable.[86]

In an effort to further promote trucking from Dalecarlia as the only alternative, the Corps has overlooked serious problems in the trucking alternative, misrepresented information in its public presentations, and inconsistently applied its own screening criteria. According to a presentation to the public on September 28, 2004, the trucking alternative includes disposal by licensed haulers in a range of permitted facilities among seven haul routes using high volume roads. The Corps has not presented information on the viability of all seven truck routes, nor the environmental impact on any one route that might eventually be the sole acceptable route for trucking a daily average of nine to twenty truck loads.[87] The Corps has also not disclosed the final destination for the trucks in order to allow the community to examine the most appropriate routes.

The current Corps proposal assumes that all seven proposed routes are viable options and may be combined to lower the number of trucks impacting any one neighborhood. Every one of these routes utilizes MacArthur Boulevard.[88] The Corps ignores the fact that use of MacArthur Boulevard is an unreasonable route in order to promote the trucking alternative.

> Because of the load limitation on MacArthur Boulevard from the Dalecarlia site north into Maryland (which are due to the raw water conduits being located directly beneath the roadway), truck traffic would have to be routed either to Western Avenue or Massachusetts Avenue to go north. To go south, the route would be MacArthur Boulevard to Key Bridge. Trucks are prohibited from using the Clara Barton Parkway and have great difficulty negotiating the right turn at Arizona Avenue on to Canal Road in an attempt to get to Chain Bridge and into Virginia.[89]

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.[90] In 1996, the Corps selected two different "most preferred" routes[91] 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

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[82] *See* December 2004 Report Table 2-3, alternatives P1 – P66, P74, P75, P86, P88-P90, P94, P95.
[83] *See id.*, alternative P73.
[84] *See id.*, alternatives P93, P91, P100, P102.
[85] *See id.*, alternatives P67, P76, P77, P81, P92.
[86] *See* Letter from Betty Hager Francis, Director of Public Works, to Richard Capka, Corps, dated May 2, 1994, p. 2, Attachment 12 (Exhibit 4-3 from the *1995 Residuals Disposal Study*).
[87] *See* Presentation from May 26, 2004 Meeting, p. 28. The Corps also has not demonstrated how this daily average was determined. For example, the *Residuals Disposal Study* examined a range from 10 to 16 daily truck loads up to peak capacity requiring 19 to 32 truck loads (p. 2-12).
[88] *See* Presentation from May 26, 2004 public meeting, p. 29.
[89] *Report to Congress*, prepared in response to H.R. 107-216 and S.R. 107-85 accompanying the District of Columbia Appropriations Act, 2002. P.L. 107-96, Attachment 13.
[90] *See 1995 Residuals Disposal Study* § 2.3.
[91] *See* Memorandum from William Colley to Victoria Binetti dated June 10, 1996, p. 2, Attachment 14.

traffic."[92] The *1995 Residuals Disposal Study* also indicates that different routes pose problems such as tight turns for different types of trucks. Even the 15 attendees at the January 28, 2004 meeting recognized and commented on the need to "take into consideration the environmental impact that trucking would have on the communities involved, their near neighbors."[93] The Corps must carefully examine all of the environmental impacts on the community in assessing potential trucking routes.

The dredging project between 1996 and 1999 also revealed that trucking was a "major concern for the safety and quality of life of the community. It was evident that any permanent major trucking operations from Dalecarlia would face significant obstacles."[94] The community has raised similar serious issues with trucking regarding safety risks, pollution, damage to residential property, damage to roads, odors, noise, hours of operation and visual impact.[95] Although the Corps recognized that a trucking scheme "would have serious consequences in the residential neighborhoods,"[96] the Corps has summarily dismissed major concerns in order to keep trucking on the table.

The Corps must fully address the costs,[97] 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.

59-4-ND

B. Despite its Inability to Get Critical Documents, the Public Has Nonetheless Offered Over 100 Reasonable Alternatives, but the Corps Has Summarily Rejected Most of These in its December 2004 Report.

The Corps must revise its screening criteria and reexamine the offered alternatives in a consistent manner to determine the full range of reasonable alternatives. The December 2004 Report acknowledged receipt of 94 public alternatives and eight options.[98] The Corps rejected 85 of these newly identified alternatives out of hand, stating that they were inconsistent with its unduly narrow screening criteria;[99] retained two as potentially being consistent with its screening criteria; and was still evaluating the remaining seven. We have heard nothing of the fate of these seven alternatives.[100] The Corps has since stated that it will not evaluate one of the two "consistent" alternatives because it "represents a new disposal option for an existing

[92] *See id.*
[93] Comments from January 28, 2004 Meeting, p. 2.
[94] *See Report to Congress*, prepared in response to H.R. 107-216 and S.R. 107-85 accompanying the District of Columbia Appropriations Act, 2002. P.L. 107-96, Attachment 13.
[95] *See e.g.*, Oral Statements from the September 7, 2004 public meeting, 5:13-23, 9:14-23, 10:3-8, 20:14-20.
[96] *See* Jacobus Decl. ¶ 23, Attachment 1.
[97] The *Residuals Disposal Study* indicates that costs increase as the distance to the disposal site increases (p. 2-13): ACE should consider that costs will increase in the future as local landfills reach their capacity, forcing ACE to ship residuals to more remote locations as it indicated in its presentation from the September 7, 2004 public meeting, p.7.
[98] December 2004 Report, p. 2-20.
[99] *See* fn. 3 *infra*.
[100] The Corps has not posted anything regarding these alternatives on its website, nor has the Corps communicated with us regarding these alternatives.

alternative."[101] The Corps eliminated dozens of reasonable alternatives based on its faulty screening criteria, as discussed below.

59-5-DD, DE, DF, DG, DH, DK

1. The Corps Needs to Seriously Consider The New Alternatives, and to Include Them in the DEIS, Particularly Those Involving Piping to Alternative Locations.

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 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.[102] The Corps' failure to consider other piping options is particularly unreasonable given the ongoing discussions about a regional approach to water management.

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 shows its bias against piping by its refusal to consider other facilities. By comparison, the Corps has not limited trucking from Dalecarlia to only one route, but suggests 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.

A hard look at the multiple, realistic variants of the general piping alternative are likely to reveal a preferred alternative with less environmental impact than the Dump or trucking from Dalecarlia. The piping alternative should not be cursorily eliminated from consideration merely because institutional constraints might preclude piping residuals to the Blue Plains facility.

2. The Corps Needs to Seriously Consider Alternatives that Would Move the Dewatering Facility to an Alternative Location.

a. The Proposed Dewatering Facility is Not Consistent with a Residential Neighborhood.

The Corps needs to seriously consider reasonable alternatives that will move the proposed water treatment facilities out of a well-established, densely populated, residential neighborhood into a more suitable location. The proposed industrial facilities, which may typically operate from 7:00 a.m. to 11:00 p.m.,[103] are 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

[101] December 2004 Report, p. 2-20.
[102] *See* Letter from Betty Hager Francis, Director of Public Works, to Richard Capka, Corps, dated May 2, 1994, Attachment 12 (Exhibit 4-3 from the *1995 Residuals Disposal Study*); Jacobus Decl. ¶ 17, Attachment 1.
[103] *1996 Design Memorandum*, vol. 1, p. 7-34.

neighborhood. The Corps recognized that "the proposed facilities . . . may negatively affect property values."[104]

b. The Dewatering Facility Should Be Moved Up River to a Location that is More Commercial or Industrial in Nature.

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.[105] The Corps cannot use its unduly narrow screening criteria to eliminate these alternatives.

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.

We also have serious concerns about the feasibility of building the dewatering facility on the Aqueduct grounds due to a potential munitions problem there as well. A prior study reported "strong petroleum-like odors" in borings DC-8, DC-12, DC-13, DC-19, and SWM-1 on the Aqueduct property in the immediate vicinity of the area where the dewatering facility would be built.[106] The presence of petroleum odors during boring and perchlorate in the groundwater[107] provide reason to believe that munitions may be buried on the Aqueduct grounds.[108] Perchlorate was also detected near Sibley Hospital, in the vicinity of another proposed location for a dewatering facility closer to Sibley Hospital.[109] "There is speculation about ammunitions buried by the Dalecarlia Treatment plant. . . ."[110] The proposed area near Sibley Hospital raises the same concerns about locating a dewatering facility in such a densely populated residential neighborhood as described above. These concerns will need to be thoroughly investigated, and dismissed, before construction of a dewatering facility on either the Aqueduct grounds or near Sibley Hospital can be considered a reasonable alternative.

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[104] Washington Aqueduct Residuals FAQs from Washington Aqueduct website, question 18.
[105] See Aerial Photograph, Attachment 15.
[106] *See e.g., 1996 Design Memorandum,* vol. 3, p. 9 and Boring Logs from Appendix B, Attachment 16.
[107] *See* Meeting Minutes, District of Columbia Water and Sewer Authority Board of Directors, Environmental Quality and Operations Committee Meeting dated October 29, 2004, § II.1, Attachment 10.
[108] *See* Albright Report.
[109] *See* Meeting Minutes, District of Columbia Water and Sewer Authority Board of Directors, Environmental Quality and Operations Committee Meeting dated October 29, 2004, § II.1, Attachment 10.
[110] Meeting Minutes, District of Columbia Water and Sewer Authority Board of Directors, Environmental Quality and Operations Committee Meeting, dated November 18, 2004, p. 5, Attachment, 17.

59-6-DJ

III. The Corps Needs to Coordinate Its NEPA Planning Process with the Region's Ongoing Regionalization Studies so that the Corps Does Not Waste $60 Million on an Unreasonable Alternative.

In 1996, WASA undertook a study to evaluate the feasibility of WASA organizing as a regional authority, much like WMATA or MWAA. This initial Regionalization Study decided to preliminarily retain the present structure, with WASA as an independent authority under the DC Government. The WASA Board recognized that this preliminary assessment needed to be re-evaluated in five years. WASA drafted a second Regionalization Study in 2000, which concluded that "conversion of DC-WASA to an independent, interstate compact authority is legally and technically feasible." [111] The 2000 Regionalization Study recommended that the current governance should be retained, but that the issue should again be revisited no later than 2005.[112] On February 8, 2005, the Montgomery County Council met with representatives of WASA. Among the topics discussed was a new Regionalization Study to re-evaluate the feasibility of WASA organizing as a regional authority. Plans to undertake this study will be finalized in the next two months.[113] One of the issues that is expected to be explored is the potential for WASA to take over the responsibilities currently performed by the Corps in operating the Washington Aqueduct facility.

Despite repeated FOIA requests seeking information about the Corps' communications with cooperating agencies, we have been unable to learn who the cooperating agencies are and the nature of the Corps' communications with them. As a result, we do not know whether the Corps is aware of the County's regionalization studies or making any effort to coordinate the planned changes at Dalecarlia with other regional efforts. Due to the Corps' failure to disclose any documents regarding discussions it has had with Montgomery County and other jurisdictions, it remains unclear what efforts are being untaken to ensure a cost-effective solution to regional water supply issues. One of the primary purposes of NEPA is to encourage precisely this type of dialogue so that the agencies will coordinate their planning and avoid what could be a costly mistake. The Corps must coordinate its NEPA planning process with local regionalization studies and plans to avoid expending time and resources on a project that could ultimately be a $60 million mistake.

59-7-ND

IV. 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

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[111] District of Columbia Water and Sewer Authority Regionalization Study dated December 2000, p. 3, Attachment 18.

[112] *Id.* p. 7, Attachment 18.

[113] *See* Memorandum from Bruce Romer to Thomas Perez dated February 4, 2005, p. 3 ("Regionalization Study", Attachment 19.

alternatives including the proposed action."[114] The purpose and need statement provides the basis for determining which reasonable alternatives the agency shall rigorously explore.[115] 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,"[116] or "that only one alternative . . . would accomplish the goals of the agency's action, and the EIS would become a foreordained formality."[117] The Corps used an overly narrow statement of purpose and need to develop unduly narrow screening criteria and has eliminated reasonable alternatives from 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.[118]

Instead, the Corps has engaged in a sham process that is only looking 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.

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)

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[114] 40 C.F.R. § 1502.13.
[115] *See Wyoming v. United States Dept. of Agriculture*, 277 F. Supp 2d 1197, 1222 (D. Wy. 2003).
[116] *Id.* (citation omitted).
[117] *Citizens Against Burlington, Inc., v. Busey*, 938 F.2d 190, 295 (D.C. Cir. 1991) (citation omitted).
[118] *See* 40 C.F.R. §1502.14.

- 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)[119]

When justifying its actions, the Corps goes a step further by stating that the screening criteria embodies the purpose and scope of the project. However, the screening criteria must be revisited because the Corps drafted them too narrowly.

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 the 15 people who attended the January 2004 meeting:

- 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.[120]

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.[121]

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[119] *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. 1,698-02 (Jan. 12, 2004).
[120] *Draft Environmental Impact Statement for a Proposed Water Treatment Residuals Management Process,* Presentation from January 28, 2004 Meeting, p. 6.

The Corps' proposed schedule 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 years[122] to construct the facilities. [123] 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.[124] 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.

As previously discussed, 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."[125] 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 with the dates established in the FFCA.

C. Inadequate Involvement of the Public Demonstrated the Flawed Scoping Process and Cannot be Retroactively Cured.

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.[126] This 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.[127]

"Scoping is a process, not an event or a meeting."[128] Scoping is a "process to initiate preparation of an EIS."[129] During scoping, the lead agency invites the participation of other agencies and

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[121] 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*, p. 11.

[122] Bill Bulman even stated that 3 1/2 to 4 years "seems too optimistic, unless the plans and specifications are already complete." Outline Review of the *1995 Residuals Disposal Study*, from Bill Bulman, dated August 7, 1996, p. 5, Attachment 3.

[123] *Schedule*, Presentation from May 26, 2004 public meeting, p. 33; *see* Letter from Paul Hoff to David Arent dated April 15, 2003, Attachment 4; *1996 Design Memorandum,* vol. 1, p. ES-6 ("Construction has been estimated to take 36 months and potentially longer if the work commences in the late fall/early winter season.").

[124] *See Schedule,* Presentation from May 26, 2004 public meeting, p. 33.

[125] *See Wyoming v. United States Dept. of Agriculture*, 277 F. Supp 2d at 1220.

[126] 40 C.F.R. § 1501.7.

[127] 40 C.F.R. § 1501.7.

[128] Memorandum for General Counsels, NEPA liaisons and Participants in Scoping, Council on Environmental Quality dated April 30, 1981 at § II.A, Attachment 20.

[129] *Id.*

interested parties to participate in developing the EIS process.[130] The Corps identified a scoping period to last from January 12, 2004 until February 11, 2004.[131] 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 the public at one single meeting on January 28, 2004 and has not engaged in any meaningful dialogue regarding the EIS process or environmental concerns regarding the Project. Further, the January 28, 2004 "Scoping Meeting"[132] occurred little more than halfway through the duration of the scoping process timeline announced in the *Federal Register.*

The 15 participants in the January 28, 2004 meeting could attend at any point during the two-hour duration of this "public open house" to view a series of eight exhibit boards illustrating different aspects of the project. Washington Aqueduct employees staffed the boards, and summary handouts were available to participants.[133] The Corps did not provide information packets to the attendees describing the proposal with "an initial list of impacts and alternatives, maps, drawings, and any other material or references that can help the interested public to understand what is being proposed."[134] Nothing in the record indicates that the scoping process was explained at this meeting, procedure to be used, or if potential participants were provided a context for their involvement.[135] The Corps' open house and purported scoping did not provide all parties with an "opportunity to meet one another and to listen to the concerns of the others."[136] The Corps did not encourage participation by anyone outside of those few already involved in examining the project since 1995. Those already involved did not take the January 28, 2004 meeting seriously, as evidenced by the comment that the barge in the C&O Canal was offered "more or less as a joke."[137] The Corps was required to invite the general public, and especially local residents, to participate in the scoping process to obtain meaningful input, but it did not.

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*

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[130] 40 C.F.R. 1501.7(a).
[131] The Corps scheduled the scoping period to last 30 days immediately following the publication of the Notice of Intent in the Federal Register on January 12, 2004.
[132] *See* December 2004 Report, p. 2-2.
[133] *Scoping Meeting Summary* from the Washington Aqueduct website.
[134] *See* Memorandum for General Counsels, NEPA liaisons and Participants in Scoping, Council on Environmental Quality dated April 30, 1981 at II.B.2, Attachment 20.
[135] *See id.* at II.A.2, Attachment 20.
[136] *See id.* at II.B.3, Attachment 20.
[137] Oral statements from January 28, 2004 Meeting, p. 3.

project sit should be notified individually."[138] Despite the Corps' possession of a comprehensive list of nearby residents resulting from its munitions investigation in Spring Valley, the Corps did not utilize that list to alert the adjoining land owners. The Corps only sent 63 invitations to those "that had been involved with Washington Aqueduct environmental issues previously."[139] The Corps only notified 232 local residents by direct mail in May of 2004, well after the scoping period had ended.[140] Later mailings included over 1000 letters, but only after people came forward to the Corps demanding information. These efforts came too late. The Corps made no attempt to comply with CEQ guidance by notifying the abutting landowners or major businesses in the neighborhood of the initiation of the scoping process.

Although the Corps has held subsequent meetings, by its own admission the Corps did not intend for these meetings to fulfill NEPA requirements.[141] 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.[142] Instead, these meetings were held to communicate the Corps' decisions regarding which alternatives to pursue and general progress to the public.[143] For example, the May 26, 2004 meeting was held to "*communicate the results* of an initial project alternatives screening process with the public to *disclose* the four alternatives that would be analyzed in detail in the Draft Environmental Impact Statement."[144] The slides from this meeting only disclose the four alternatives selected from an initial pool of 26 alternatives and do 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."[145] The Corps had already determined the path it chose to pursue as defined by its overly narrow purpose and scope and did not adequately involve the public.

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.[146] 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.[147] Attendees' comments also describe

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[138] Memorandum for General Counsels, NEPA liaisons and Participants in Scoping, Council on Environmental Quality dated April 30, 1981, Attachment 20.
[139] Washington Aqueduct Residuals FAQs from Washington Aqueduct website, question 6.
[140] *Id.*
[141] *See id.* (stating that the meetings subsequent to the January 28, 2004 meeting were "not required by NEPA regulations").
[142] Ironically, ACE is cited in the Memorandum for General Counsels as exemplifying a "successful model" which ACE did not use here. *See* Memorandum for General Counsels, NEPA liaisons and Participants in Scoping, Council on Environmental Quality dated April 30, 1981, at II.B.5 Attachment 20.
[143] *See* Washington Aqueduct Residuals FAQs from Washington Aqueduct website, question 6.
[144] *Id.* (emphasis added).
[145] *Id.* (emphasis added).
[146] *See* Memorandum for General Counsels, NEPA Liaisons and Participants in Scoping, Council on Environmental Quality dated April 30, 1981, p. 3, Attachment 20 ("[S]coping is *not* simply another 'public relations' meeting requirement.") (emphasis added).
[147] Washington Aqueduct Residuals FAQs from Washington Aqueduct website, question 6.

the ineffectiveness of the format and express concerns about the screening process and lack of information shared with the public.[148] 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.[149] "What is important is that the notice actually reach the affected public."[150] Notice of the scoping process did not reach the affected public.

D. The Corps Failed to Disclose Necessary Documents.

NEPA procedures require that "high quality" environmental information is "available to public officials and citizens before decisions are made and before actions are taken."[151] Here, despite repeated requests, we have not received the majority of the documents necessary for an educated evaluation of the feasible alternatives, precluding the review and input required by NEPA. The Corps made decisions about the scoping process and alternatives to be considered before making any environmental information available to local citizens. The Corps disclosed the 26 alternatives it selected for consideration at the May 26, 2004 meeting, for which the Corps provided inadequate public notice. Most citizens first learned of 24 of the 26 alternatives long after this meeting and only after the Corps decided to pursue only three.[152] The Corps narrowed the alternatives to only three without involving or consulting the affected communities. Without the benefit of seeing and reviewing the underlying documents, the community cannot comment adequately on the three "finalists", never mind the 26 alternatives.

"Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA."[153] In order to obtain accurate scientific analysis and comments of various agencies involved in this project, we submitted FOIA requests to the Corps. The Corps agreed to provide documents on October 6, 2004. We wanted to obtain prior studies and reports on which the Corps had made its decisions. These documents would allow us to scrutinize the project and develop any additional alternatives for consideration. Although the Corps finally posted the first of the requested documents to its website two months after agreeing to provide documents,[154] we have not yet received a vast majority of the documents identified in our FOIA requests submitted on September 27 and November 24, 2004.[155] The Corps' failure to provide "high quality" environmental information, including scientific analysis and expert agency comments, has denied the public scrutiny essential to implementing NEPA.

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[148] Comments from the September 7, 2004 Meeting; Letter from Thomas Jacobus dated September 10, 2004, Attachment 6.

[149] *See Northwest Coalition for Alternatives to Pesticides v. Lyng*, 844 F.2d 588, 594-95 (9th Cir. 1988).

[150] Memorandum for General Counsels, NEPA liaisons and Participants in Scoping, Council on Environmental Quality dated April 30, 1981 at II.A.4, Attachment 20.

[151] 40 C.F.R § 1500.1(b).

[152] The Corps sent only 144 letters to the community informing them of this meeting, so very few residents were aware of the meeting, the screening process, or the original alternatives until much later in the NEPA process. December 2004 Report, p. 4-3.

[153] 40 C.F.R § 1500.1(b).

[154] December 16, 2004.

[155] We also submitted a third request on February 10, 2005 which identified specific documents within the larger categories requested.

"The statutory duty to disclose relevant environmental information is not discretionary. . . ."[156] Because the Corps has not yet made all the documents requested in our FOIA requests available to us, our response must of necessity be partial and incomplete.[157] We have not received documents, despite their relevance to our ability to comment on alternatives in response to the Corps' artificially imposed "comment" deadlines. We have not received those documents despite the Corps' initial determination that it would grant our FOIA request, despite an in-person request for copies of the documents, and despite several follow-up phone calls and letters requesting a date certain by which we could expect to receive those critical documents. We have made our best effort to identify other alternatives that should be evaluated by the Corps as part of the EIS process, despite the Corps' refusal to provide us with critical documents that have been in its possession for the past ten years – documents that the Corps has admitted provided the basis for the 26 alternatives that were originally placed on the table for consideration in the EIS process.

E. The Corps Failed to Include Other Cooperating Agencies.

Despite repeated FOIA requests seeking information about the Corps' communications with cooperating agencies, as required by NEPA, we have been unable to learn who the cooperating agencies are and the nature of the Corps' communications with them.[158] As a result, we do not know whether the Corps is talking with Federal, state, and local governments, including those involved in regionalization studies, or discussing how those regionalization efforts would impact the water treatment residuals changes being proposed at Dalecarlia, or other environmental impacts from the project. From our independent investigation we have concluded that the Corps should have contacted the following agencies at the beginning of the scoping process for the project:

- Arlington County Offices and Departments;
- City of Falls Church Offices and Departments;
- Department of the Air Force;
- Department of the Navy;
- District of Columbia Offices and Departments, including the District of Columbia Department of Environmental Health, and the Water and Sewer Authority;
- Maryland Department of the Environment;
- Montgomery County Offices and Departments;

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[156] *Conservation Law Found., Inc. and Town of Newington v. Dept. of the Air Force*, 864 F. Supp. 265, 288 (D.N.H. 1994).

[157] *See* Letter from Michael Galano to Tim Anderson dated September 27, 2004, Attachment 21; Letter from Michael Galano to Tim Anderson dated November 24, 2004, Attachment 22; Letter from Michael Galano to Tim Anderson dated February 10, 2005, Attachment 23.

[158] Letter from Michael Galano to Tim Anderson dated September 27, 2004, Attachment 21; Letter from Michael Galano to Tim Anderson dated November 24, 2004, Attachment 22; Letter from Michael Galano to Tim Anderson dated February 10, 2005, Attachment 23.

- National Capital Planning Commission;
- National Marine Fisheries Service;
- National Park Service;
- United States Environmental Protection Agency, including headquarters and Region III;
- United States Fish and Wildlife Services.

However, we have no indication of the nature or extent of any communication between the Corps and these agencies. The Corps' failure to provide information it agreed to provide in our FOIA request has impeded our ability to fully participate in the NEPA process.

The Corps' December 2004 Report discloses that the Corps consulted with some agencies beginning in April 2004. However, the December 2004 Report indicates that the Corps consulted other agencies regarding specific issues only, and the Corps did not include any of the agencies in the scoping process to develop the EIS process. For example, the first agency consultation listed by the Corps occurred on April 7, 2004 with WASA. This meeting discussed the "feasibility of sending water treatment residuals to Blue Plains for treatment via Potomac Interceptor."[159] The only other meeting listed was a consultation with WASA that occurred on August 16, 2004 to continue the same discussion.[160] The list of agency consultations included in the December 2004 Report includes dates through mid-December. However, DC WASA's meeting minutes reveal that Mr. Tom Jacobus made a presentation to DC WASA on October 29, 2004,[161] which was not indicated in the December 2004 Report. The Corps discussed the feasibility of the Blue Plains and Monofill alternatives as well as construction permits with various agencies.[162] We need full disclosure from the Corps to understand the full extent and nature of interagency cooperation.

F. The Corps Failed to Consider Options that Would Reduce the Volume of Residuals.

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 the project is to reduce the volume of solids coming into the plant.[163] 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

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[159] December 2004 Report, p. 4-6.
[160] *Id.*
[161] *See* Meeting Minutes, District of Columbia Water and Sewer Authority Board of Directors, Environmental Quality and Operations Committee Meeting dated October 29, 2004, § II.1, Attachment 10.
[162] *See* December 2004 Report, pp. 4-5 to 4-7.
[163] 69 Fed. Reg. 1,698-02 (Jan. 12, 2004).

Judgment and is consistent with EPA's removal efficiencies for municipal dischargers.[164]

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 is intended to better define the behavior of coagulant bearing sediments once they are discharged from the sedimentation basin."[165] Due to the Corps' failure to respond to our FOIA requests, it is unclear where these studies are located or what the results were. 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.[166] 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.[167] 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.

V. Conclusion

The Corps has violated NEPA by establishing its own process for developing the EIS without input from an informed public. The Corps must revisit the 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. The Corps must involve the public and other agencies in developing an appropriate EIS process that meets the requirements of NEPA. 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 provide "high quality" information to the public so that we may scrutinize the alternatives presented. The Corps should recognize the flaws to date and restart the process to 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 the project.

Very truly yours,

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[164] Draft Permit Fact Sheet, NPDES Permit Reissuance, Washington Aqueduct Water Treatment Plant, Washington DC, at 20 (Dec. 17, 2002).
[165] *Id.* at 22 (Dec. 17, 2002).
[166] *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).
[167] *See* December 2004 Report, Tables 2-3 and 2-4.