TO TO THE SOUTH OF THE SOUTH OF

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

U.S. Department of Energy Office of Legacy Management, LM-40 1000 Independence Avenue, SW Washington, D.C. 20585-0002

Dear :

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

OFFICE: Special Projects Branch SUBJECT: NFSS Tech. Doc. Release

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

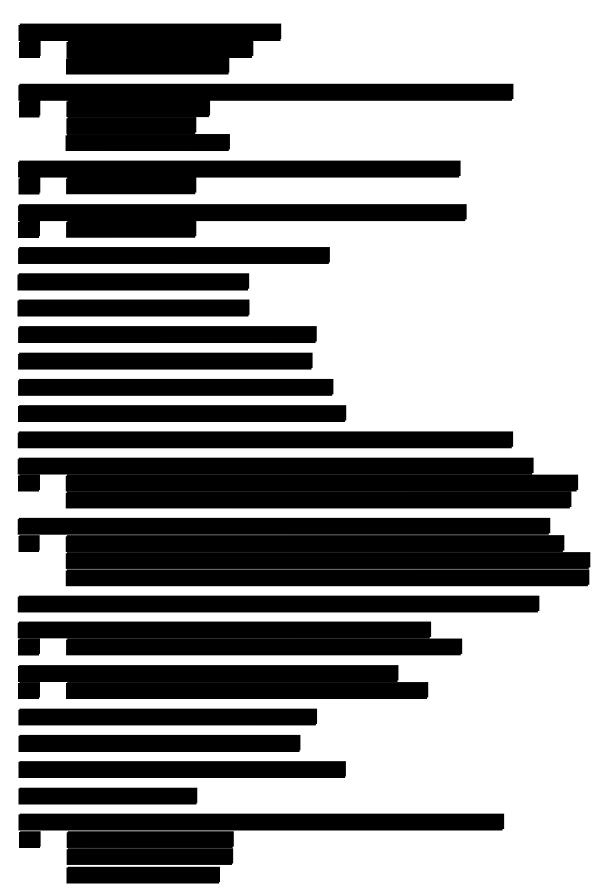
Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

This letter and the enclosed electronic version of the <u>Preliminary Evaluation of Health</u> <u>Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to the enclosed list of individuals. The documents also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at (if you have any questions.

Sincerely,

Environmental Project Management Team Project Manager



and the second s

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

Mr.

United States Environmental Protection Agency, Region 2 Division of Environmental Planning and Proection 290 Broadway, 28th Floor New York, NY 10007-1866

Dear :

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

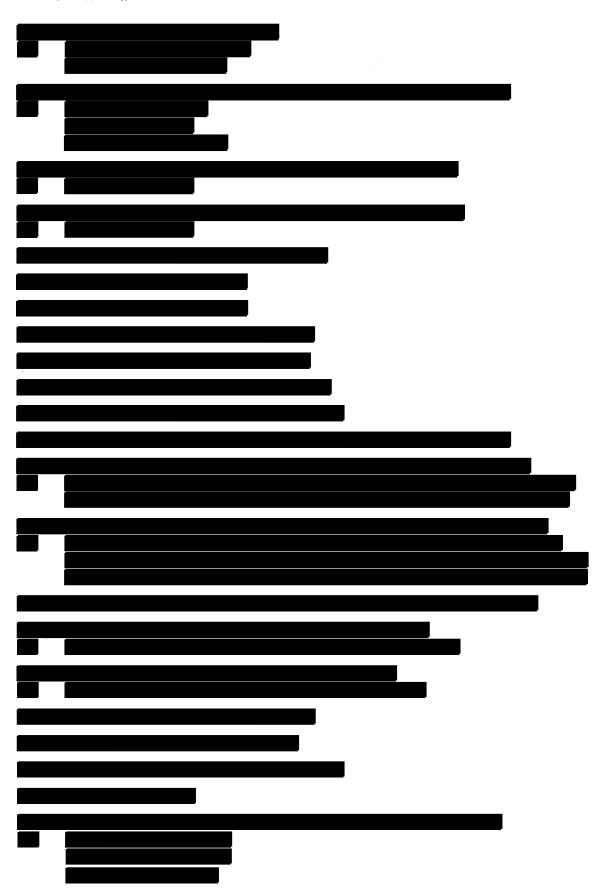
Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

A copy of this letter and the enclosed electronic version of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to Mr. Mike Basile, United States Environmental Protection Agency, Region 2; United States Environmental Protection Agency, Region 2; and to the enclosed list of individuals. The documents also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at if you have any questions.

Sincerely,

Environmental Project Management Team Project Manager



A TANKS OF LINES OF L

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

. Bureau Director

Remedial Bureau A
New York State Department of Environmental Conservation
625 Broadway, 11th Floor
Albany, NY 12233-7015

Dear :

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary</u> Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

OFFICE: Special Projects Branch SUBJECT: NFSS Tech. Doc. Release

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

A copy of this letter and the enclosed electronic version of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to ________, Section Chief, Remedial Bureau A, Radiological Sites Section; ________, Remedial Bureau A, Radiological Sites Section; ________, Remedial Bureau E, Section B; and to the enclosed list of individuals. The documents are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at if you have any questions.

Sincerely,

Environmental Project Management Team
Project Manager



AT OF THE PARTY OF

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

Regional Director
New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, NY 14203-2915

Dear

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants</u> <u>from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

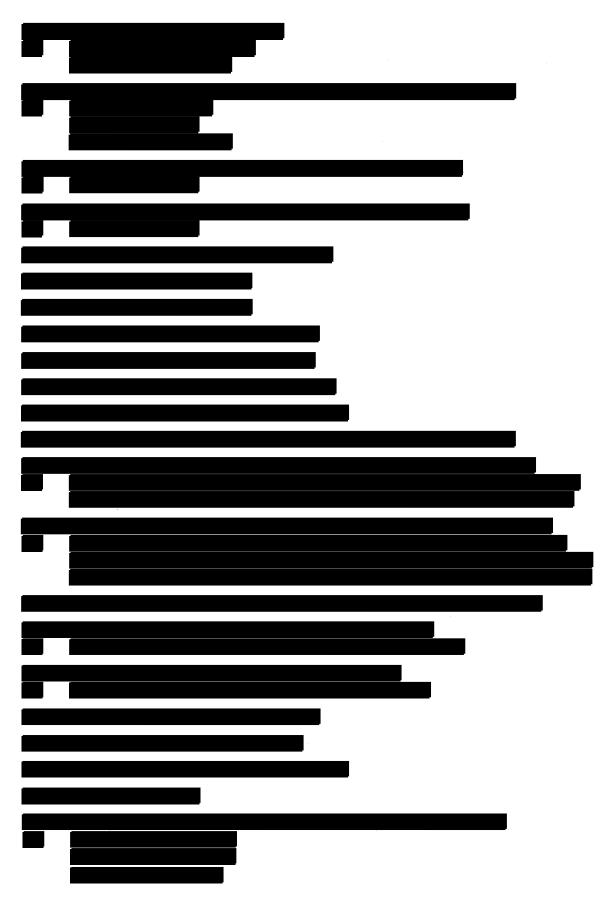
- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

This letter and the enclosed electronic version of the <u>Preliminary Evaluation of Health</u> <u>Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to the enclosed list of individuals. The documents are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.



A TOP TO THE POPULATION OF THE

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

, MS, MPH, CHP Chief, Environmental Radiation Section New York State Department of Health 547 River Street, Room 530 Troy, NY 12180-2216

Dear

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

-2-

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

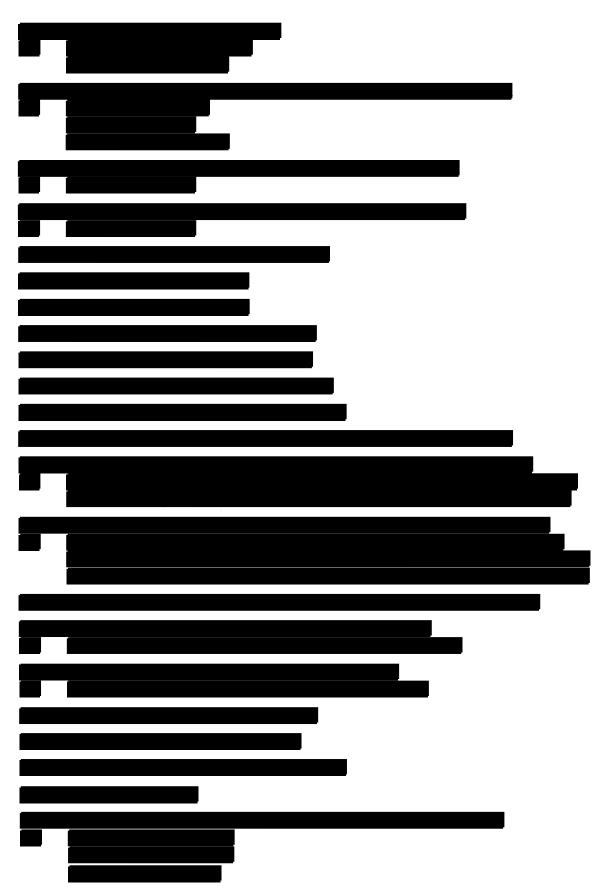
This letter and the enclosed electronic version of the <u>Preliminary Evaluation of Health</u> <u>Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to the enclosed list of individuals. The documents are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at ______ if you have any questions.

Sincerely,

Environmental Project Management

Environmental Project Management Team Project Manager



DEPARTMENT OF THE ARMY BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199



REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

Project Manager
New York State Department of Health
Western Regional Office
584 Delaware Avenue
Second Floor, Suite 201
Buffalo, NY 14202

Dear :

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier <u>Radon Assessment Technical Memorandum</u>.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

OFFICE: Special Projects Branch SUBJECT: NFSS Tech. Doc. Release

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

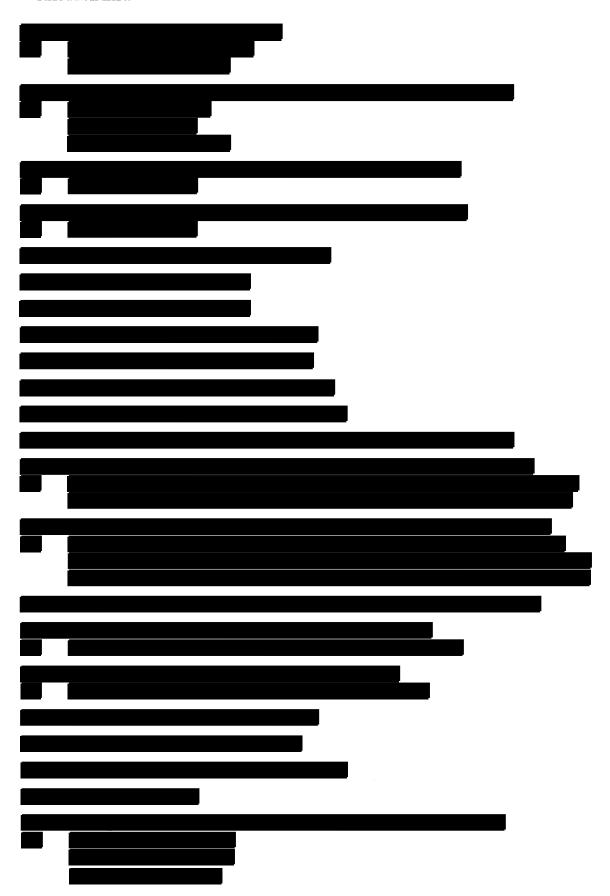
Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

This letter and the enclosed electronic version of the <u>Preliminary Evaluation of Health</u> <u>Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to the enclosed list of individuals. The documents are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at (716) 879-4375 if you have any questions.

Sincerely,

Environmental Project Management Team Project Manager



DEPARTMENT OF THE ARMY



BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

Public Health Director Niagara County Health Department 5467 Upper Mountain Road, Suite 100 Lockport, NY 14094-1899

Dear :

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

OFFICE: Special Projects Branch SUBJECT: NFSS Tech. Doc. Release

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

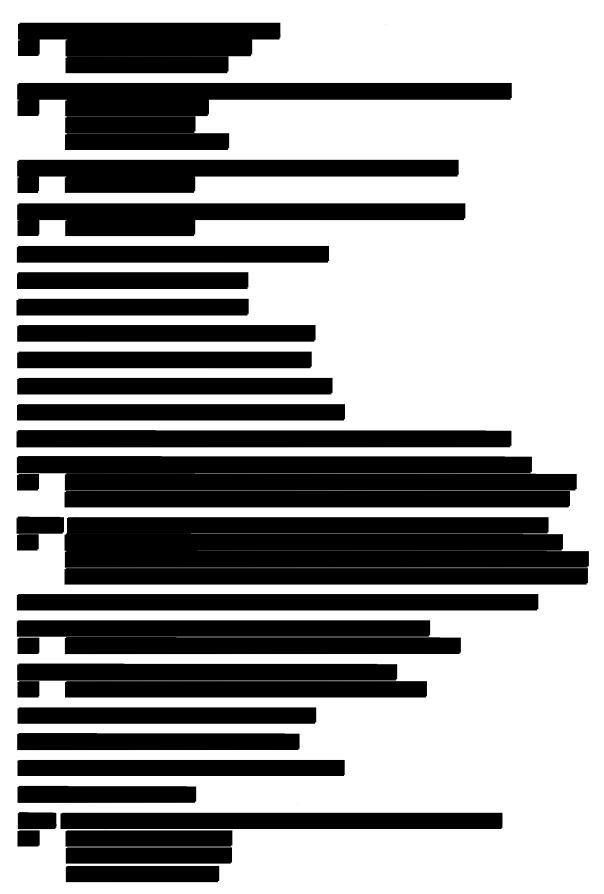
Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

A copy of this letter and the electronic version of the <u>Preliminary Evaluation of Health</u> <u>Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to Mr. Paul Dicky, Niagara County Health Department and to the enclosed list of individuals. The documents are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at if you have any questions.

Sincerely,

Environmental Project Management Team
Project Manager



THE OF MAN A

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

CWM, Chemical Services, LLC. 1550 Balmer Road Model City, NY 14107

Dear :

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

OFFICE: Special Projects Branch SUBJECT: NFSS Tech. Doc. Release

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

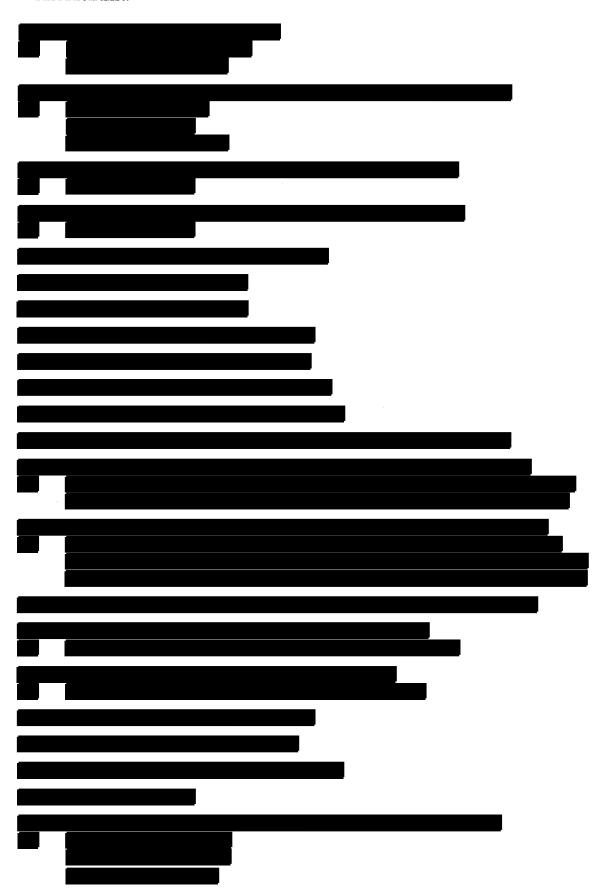
Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

This letter and the enclosed electronic version of the <u>Preliminary Evaluation of Health</u> <u>Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to the enclosed list of individuals. The documents are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at Sincerely,

Sincerely,

Environmental Project Management Team
Project Manager







BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

Vice President of Operations Modern Disposal Company, WNY 4746 Model City Road Model City, New York 14107

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

-2-

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

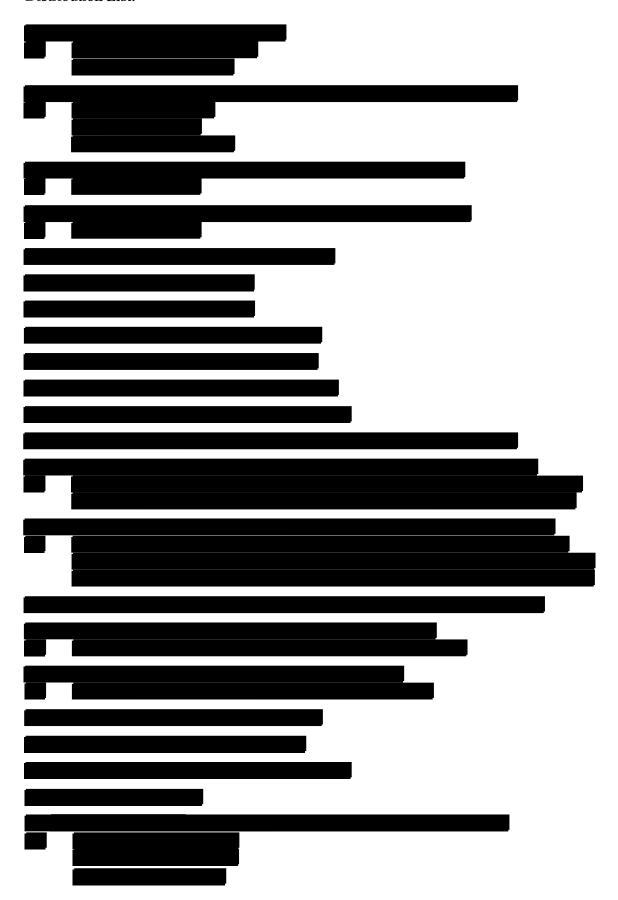
Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

This letter and the enclosed electronic version of the <u>Preliminary Evaluation of Health</u> <u>Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to the enclosed list of individuals. They are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at ______ if you have any questions.

Sincerely,

Environmental Project Management Team Project Manager



O CONTROL OF THE PROPERTY OF T

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

Mr. Real Estate Department
Occidental
5005 LBJ Freeway
Dallas, TX 75244-6119

Dear

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

SUBJECT: NFSS Tech. Doc. Release

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

-2-

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

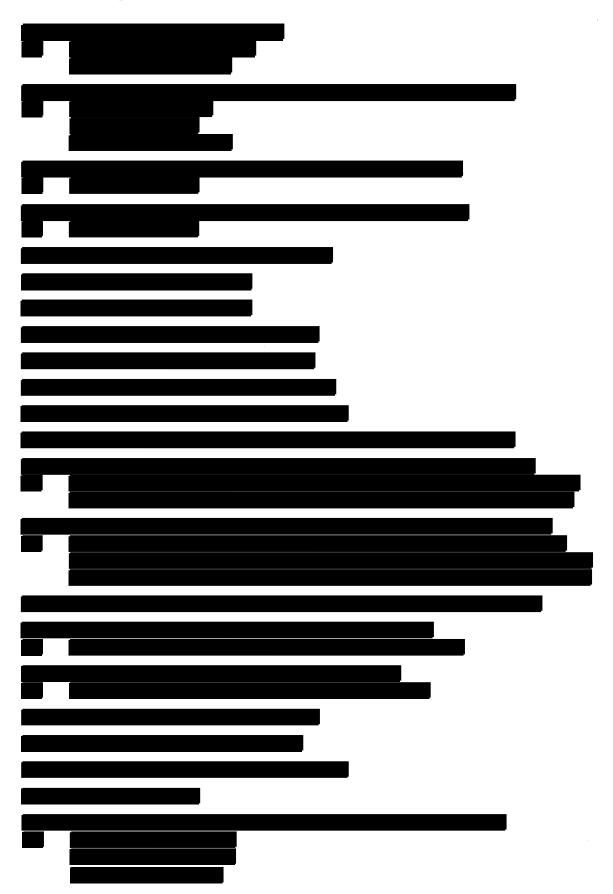
Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

This letter and the enclosed electronic version of the <u>Preliminary Evaluation of Health</u> <u>Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to the enclosed list of individuals. The documents are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at ______ if you have any questions.

Sincerely.

Environmental Project Management Team Project Manager



A TOPATES OF TAMES

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

Real Estate Rights – NY West National Grid 144 Kensington Avenue Buffalo, NY 14214

Dear :

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants</u> from the <u>Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

-2-

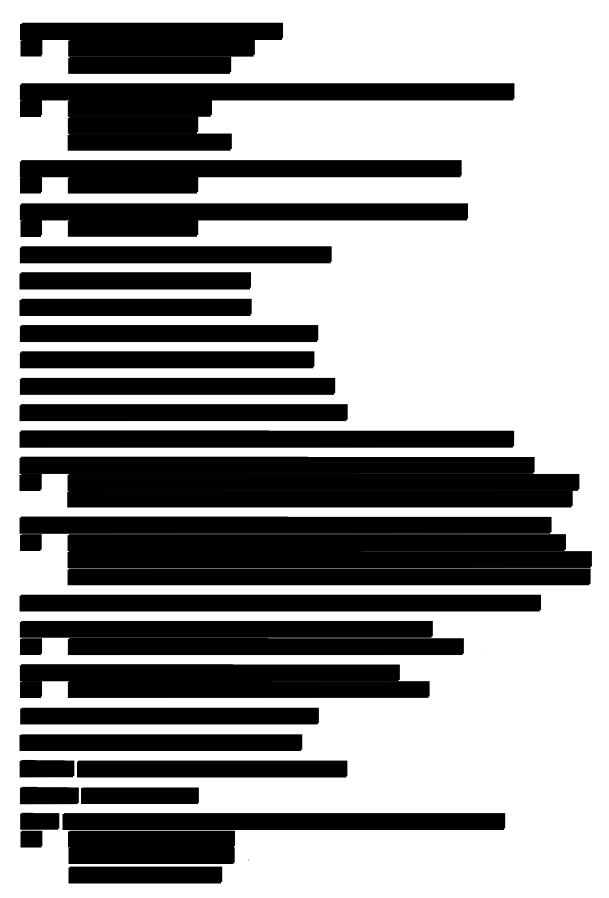
Provides preliminary estimates of doses, cancer risks, and the potential for noncarcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the Radon Assessment TM, the Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report, and the Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM.

Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

This letter and the enclosed electronic version of the *Preliminary Evaluation of Health* Effects for Hypothetical Exposures to Contaminants from the IWCS TM are being provided to the enclosed list of individuals. The documents are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at you have any questions. Sincerely, Environmental Project Management Team Project Manager



CHI OF THE SET MENT

DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

Superintendent Lewiston-Porter Central School District 4061 Creek Road Youngstown, NY 14174

Dear :

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.

d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

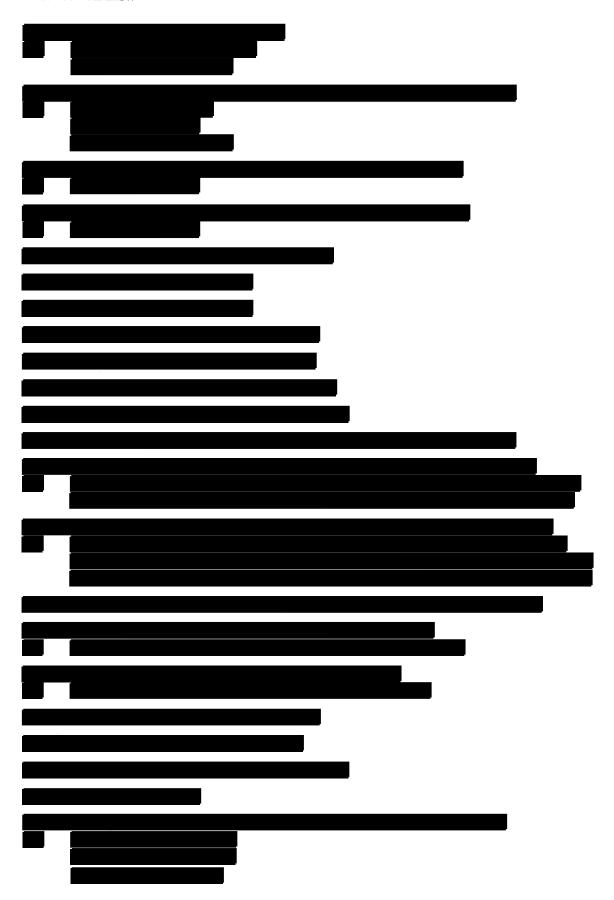
Please submit your written comments in regard to these documents to us by April 28, 2012. Your comments may be sent to the attention of the U.S. Army Corps of Engineers, Buffalo District, FUSRAP Team, 1776 Niagara Street, Buffalo, NY 14207.

A copy of this letter and the enclosed electronic version of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> are being provided to President, Lewiston-Porter Central School Board of Education; SUNY Buffalo, Dept. of Chemistry; and to the enclosed list of individuals. The documents are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at if you have any questions.

Sincerely

Environmental Project Management Team Project Manager





DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

MEMORANDUM FOR Ms. CEMP-CEP, #3Q50, U.S. Army Engineer Division, Headquarters, 441 G. Street, N.W., Washington, DC 20314

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.
- d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

SUBJECT: NFSS Tech. Doc. Release

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the *Radon*

<u>Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

The public is requested to submit written comments in regard to these documents to us by April 28, 2012.

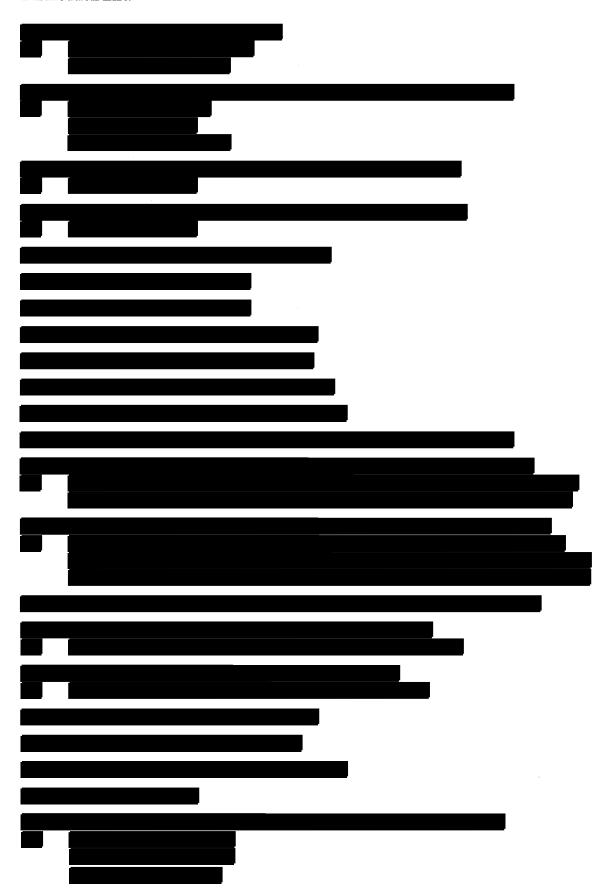
The enclosed electronic version of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> is being furnished to the provided list of individuals. They are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at (716) 879-4375 if you have any questions.



Environmental Project Management Team Project Manager

1 Disc of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures in Contaminants from the IWCS TM</u>
2 Distribution List





DEPARTMENT OF THE ARMY

BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

MEMORANDUM FOR CECW-IP, # 3167, U.S. Army Engineer Division, Headquarters, 441 G. Street, N.W., Washington, DC 20314

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.
- d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

SUBJECT: NFSS Tech. Doc. Release

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the *Radon*

<u>Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

The public is requested to submit written comments in regard to these documents to us by April 28, 2012.

The enclosed electronic version of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> is being furnished to the provided list of individuals. They are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at if you have any questions.

Environmental Project Management Team Project Manager

1 Disc of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures in Contaminants from the IWCS TM</u>
2 Distribution List



DEPARTMENT OF THE ARMY BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199



REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

MEMORANDUM FOR CELRD-PDM-M, U.S. Army Engineer Division, Great Lakes and Ohio River Division, 550 Main Street, Room 10032, Cincinnati, OH 45202-3222

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.
- d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

SUBJECT: NFSS Tech. Doc. Release

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

The public is requested to submit written comments in regard to these documents to us by April 28, 2012.

The enclosed electronic version of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> is being furnished to the provided list of individuals. They are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at if you have any questions.

Environmental Project Management

Environmental Project Management Team Project Manager

1 Disc of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures in Contaminants from the IWCS TM</u>







BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

MEMORANDUM FOR ______, CECC – LRD, U.S. Army Engineer Division, Great Lakes and Ohio River Division, 550 Main Street, Room 10032, Cincinnati, OH 45202-3222

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.
- d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

OFFICE: Special Projects Branch SUBJECT: NFSS Tech. Doc. Release

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

The public is requested to submit written comments in regard to these documents to us by April 28, 2012.

The enclosed electronic version of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> is being furnished to the provided list of individuals. They are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at (if you have any questions.

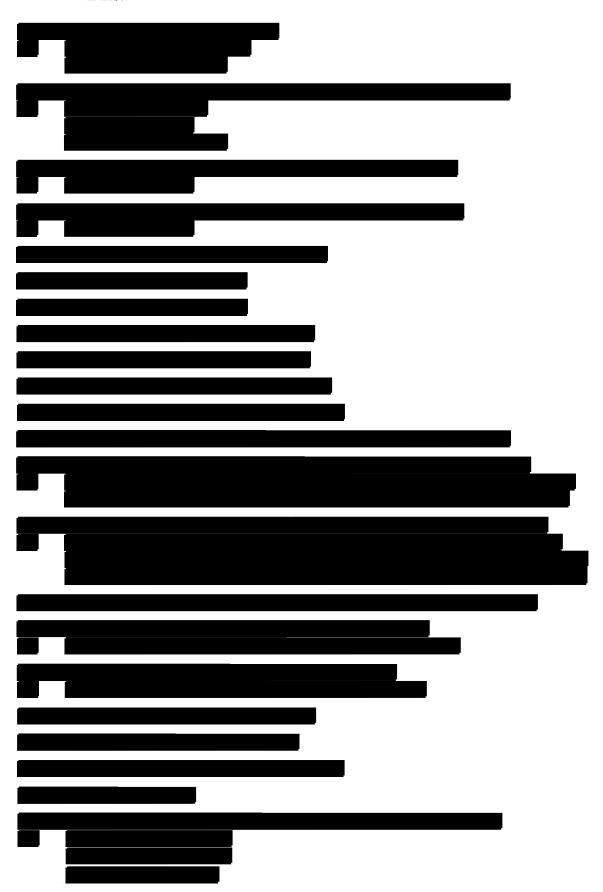
Environmental Project Management Team

Project Manager

1 Disc of the *Preliminary Evaluation of Health Effects for Hypothetical Exposures in*

2 Distribution List

Contaminants from the IWCS TM



DEPARTMENT OF THE ARMY



BUFFALO DISTRICT, CORPS OF ENGINEERS 1776 NIAGARA STREET BUFFALO, NEW YORK 14207-3199

REPLY TO ATTENTION OF

Special Projects Branch

FEB 2 7 2012

MEMORANDUM FOR CENWO-HX-S, U.S. Army Engineer Division, Center of Expertise, 1616 Capitol Ave., Omaha, Ne 68102

SUBJECT: Niagara Falls Storage Site Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containments Structure Technical Memorandum Released for Review and Comment

The U.S. Army Corps of Engineers Buffalo District is pleased to release the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure Technical Memorandum</u> for your review and comment. This document is the third in a series of technical memoranda (TM) to be released during the development of the Feasibility Study (FS) Report for the Niagara Falls Storage Site (NFSS) Interim Waste Containment Structure (IWCS) Operable Unit (OU). This TM was prepared as part of the Corps' environmental response project conducted under the Formerly Utilized Sites Remedial Action Program.

The <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the Interim Waste Containment Structure TM</u> supports the FS evaluations of short-term effectiveness, long-term effectiveness, and overall protection of human health and the environment for the different remedial alternatives being considered for the IWCS OU.

- a. Summarizes previous risk estimates for the IWCS, including estimates from the 1980s and 1990s.
- b. Provides radiological doses and cancer risks for the radon emissions estimated in the earlier *Radon Assessment Technical Memorandum*.
- c. Offers a preliminary conceptual model for the IWCS that indicates mechanisms by which contaminants could be released to air and the potential for on-site and off-site exposures.
- d. Provides preliminary estimates of doses, cancer risks, and the potential for non-carcinogenic health effects from various hypothetical exposures, to help frame the development and detailed evaluation of remedial alternatives in the FS, which also supports practical planning for source and exposure control measures to assure appropriate protection of workers, the public and the environment.

OFFICE: Special Projects Branch
SUBJECT: NFSS Tech. Doc. Release

A workshop is being held on Wednesday, March 28, 2012, beginning at 6 p.m. in the Lewiston Senior Center, 4361 Lower River Road, Youngstown, NY 14174, to discuss the <u>Radon Assessment TM</u>, the <u>Evaluation of Meteorological Data and Modeling Approaches to Assess the Dispersion of Airborne Releases from the NFSS Technical Report</u>, and the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u>.

The public is requested to submit written comments in regard to these documents to us by April 28, 2012.

The enclosed electronic version of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures to Contaminants from the IWCS TM</u> is being furnished to the provided list of individuals. They are also available on the Buffalo District website at: http://www.lrb.usace.army.mil/fusrap/nfss/index.htm#Documents.

Please contact me at if you have any questions.



Environmental Project Management Team Project Manager

1 Disc of the <u>Preliminary Evaluation of Health Effects for Hypothetical Exposures in Contaminants from the IWCS TM</u>

