# **APPENDIX A**

# INTERAGENCY COORDINATION AND CORRESPONDENCE



Southwest Region, NMFS, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802-4213 (310/980-4001);

Northwest Region, NMFS, 7600 Sand Point Way, NE, BIN C15700, Bldg., 1, Seattle, WA 98115-0070 (206/526-6150); and

Alaska Region, NMFS, P.O. Box 21668, Juneau, AK 99802–1668 (907/ 586–7221).

Dated: February 25, 2000.

Ann D. Terbush,

Chief, Permits and Documentation Division, Office of Protected Resources, National Marine Fisherles Service. [FR Doc. 00–5066 Filed 3–1–00: 8:45 am] BILLING CODE 3510-22-F

COMMODITY FUTURES TRADING COMMISSION

Applications of the Chicago Mercantile Exchange for Designation as a Contract Market for Futures and Options on the FORTUNE e-50 Index TM

AGENCY: Commodity Futures Trading Commission.

ACTION: Notice of availability of terms and conditions of proposed commodity futures and options contracts.

SUMMARY: The Chicago Mercantile Exchange (CME or Exchange) has applied for designation as a contract market for futures and options on the FORTUNE o-50 index™. The Acting Director of the Division of Economic Analysis (Division) of the Commission, acting pursuant to the authority delegated by Commission Regulation 140.96, has determined that publication of the proposals for comment is in the public interest, will assist the Commission in considering the views of interested persons, and is consistent with the purpose of the Commodity Exchange Act.

DATES: Comments must be received on or before April 3, 2000.

ADDRESSES: Interested persons should submit their views and comments to Jean A. Webb, Secretary, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street. NW, Washington, DC 20581. In addition, comments may be sent by facsimile transmission to facsimile number (202) 418-5521 or by electronic mail to secretary @cftc.gov. Reference should be made to the Chicago Mercantile Exchange (CME) for futures and options on the FORTUNE e-50 Index TM. FOR FURTHER INFORMATION CONTACT: Please contact Thomas Leahy of the Division of Economic Analysis,

Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street, NW., Washingotn, DC (202) 418–5278. Facsimile number: (202) 418–5527. Electronic mail: tleahy@cftc.gov

SUPPLEMENTARY INFORMATION: Copies of the terms and conditions will be available for inspection at the Office of the Secretariat, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street, NW., Washington, DC 20581. Copies of the terms and conditions can be obtained through the Office of the Secretariat by mail at the above address or by phone at (202) 418-5100.

Other materials submitted by the CME in support of the applications for contract market designation may be available upon request pursuant to the Freedom of Information Act (5 U.S.C. 552) and the Commission's regulations thereunder (17 CFR Part 145 (1997)) except to the extent they are entitled to confidential treatment as set forth in 17 CFR 145.5 and 145.9. Requests for copies of such materials should be made to the FOI, Privacy and Sunshine Act Compliance Staff of the Office of Secretariat at the Commission's headquarters in accordance with 17 CFR 145.7 and 145.8.

Any person interested in submitted written data, views, or arguments on the proposed terms and conditions, or with respect to other materials submitted by the CME should send such comments to Jean A. Webb, Secretary, Commodity Futures Trading Commission, Three Lafayette Centre, 1135 21st Street, NW. Washington, DC 20581 by the specified date.

Issued in Washington, DC, on February 25, 2000.

#### Richard A. Shilts,

Acting Director.

[FR Doc. 00-4967 Filed 3-1-00; 8:45 am] BILLING CODE 6361-01-M

#### DEPARTMENT OF DEFENSE

Department of the Army

#### Notice of Intent (NOI) To Prepare an Environmental Impact Statement for the Future Development and Operations at Fort Meade, MD

AGENCY: Department of the Army, DOD. ACTION: Notice of availability.

SUMMARY: The U.S. Army Fort George G. Meade, Maryland, announces its intent to prepare an Environmental Impact Statement (EIS) that will address the future development and operations of Fort Meade's Real Property Master Plan (RPMP) for the Years 2000-2004. The planned projects which will occur during this time include the following: construction of new facilities that will consolidate tenants from dilapidated World War II structures and off post leased facilities into more cost efficient and effective facilities, demolition and construction of barracks and mess halls and providing on post development opportunities for tenants on installations that are currently faced with Base Realignment and Closure. It is the purpose of this EIS to further assess the impacts, most specifically to air and traffic, that were identified in the **Environmental Assessment entitled** "Future Development and Operations Environmental Assessment" dated April 1999.

ADDRESSES: Questions or written comments may be forwarded to the U.S. Army Corps of Engineers, Baltimore District, Planning Division, Planning and Environmental Services Branch (Attn: Ft. Meade EIS), 10 South Howard Street, P.O. Box 1715, Baltimore, Maryland 21203-1715, Telephone (410) 962-4939.

FOR FURTHER INFORMATION CONTACT: Mr. Jim Gebhardt, Environmental Engineer, Directorate of Public Works Environmental Management Office, at (301) 677–9365.

**SUPPLEMENTARY INFORMATION:** The Fort Meade RPMP has the potential to significantly impact certain natural, economic, social and cultural resources of the Fort Meade community. The objective is to prepare a comprehensive EIS which will serve as a planning tool, a public information source and a reference for mitigation tracking.

Alternatives may consist of alternate locations for specific projects, partial Implementation of the specific project or modifications to the specific project. The alternatives will be developed during the preparation of the Draft EIS (DEIS) as a result of public input and the environmental analysis of the proposals within the plan. The objective Fort Meade's DEIS is to identify and evaluate any environmental implications that may result from developing the Master Plan. The DEIS will describe the impacts of existing environmental, cultural and natural resources, social, economic and environmental justice conditions associated with the proposed projects at Fort Meade.

The Army will initiate a scoping process to discuss significant issues related to the DEIS through public meetings and local publications. These efforts are designed to encourage public input that will inevitably help determine and better define the underlying issues of the DEIS. Planned public meetings will be announced through local publications and online Internet access in advance of any proposed action, announcing meeting time and location.

A public meeting will be held on Fort Meede to fectilitate input to the EIS process by citizens and organizations. The date and time of these meetings will be announced in the general media and will be at times and locations convenient to the public. To be considered in the Draft EIS, comments and suggestions should be received not later than 15 days following the public scoping meeting.

Significant issues: Within Fort Meade's boundaries lie numerous historic and prehistoric sites that were identified through the Cultural **Resources Management Plan. Fort** Meade also maintains historically significant structures which are eligible for Inclusion on the National Register and may be directly affected by the actions proposed in the long range Master Plan. Equally important is the impact Fort Meade has on the Chesapeake Bay and the crucial role it plays in maintaining and protecting which is considered one of the world's most diverse ecosystems. Fort Meade is also home to eleven State Endangered Species, including the Glassy Darter which is one of only two locations in the State of Maryland where the fish is known to exist.

Dated: February 24, 2000

Raymond J. Faiz,

.....

Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health) OASA(I&E).

[FR Doc. 00-5082 Filed 3-1-00; 8:45 am] alLING CODE 3710-08-M

#### DEPARTMENT OF EDUCATION

#### National Assessment Governing Board; Information Collection Request

AGENCY: National Assessment Governing Board; Department of Education.

**ACTION:** Notice of amended information collection request.

SUMMARY: The National Assessment Governing Board (NAGB) is amending the Notices of Proposed Information Collection Request (ICR) published on January 18, 2000 and revised on February 18, 2000. The present notice is to inform the public that the Governing Board has cancelled one of two proposed research studies. The study that was cancelled is on the feasibility of establishing a calibration linkage between a test form resembling an individual test and a survey of group results---the National Assessment of Educational Progress. The study is described in the January 18 and February 18, 2000 notices.

ADDRESSES: Written comments should be addressed to the Office of Information and Regulatory Affairs; Attention: Danny Werfel, Desk Officer: Department of Education; Office of Management and Budget; 725 17th Street, N.W., Room 10235; New Executive Office Building; Washington, D.C. 20503 or should be electronically mailed to the internet address DWERFEL@OMB.EOP.GOV. Submit written comments, on or before March 17, 2000, identified by "ICR: VNT **Research and Validation Support** Studies (Option Year 2)." The National **Assessment Governing Board will** forward to OMB any comments received from the public in response to the January 18, 2000 notice inviting requests for public comment on this ICR.

SUPPLEMENTARY INFORMATION: Section 3506 of the Act (44 U.S.C. Chapter 35) requires that the Director of OMB provide interested federal agencies and the public an early opportunity to comment on information collection requests. The Office of Management and Budget (OMB) may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State or federal law, or substantially interfere with any agoncy's ability to perform its statutory obligations. In compliance with the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), this notice amends a proposed information collection request (ICR) of the National Assessment Governing Board (the Governing Board, or NAGB) published on January 18, 2000 and revised on February 18, 2000. The information collection is to conduct a research and validation support study related to test development for the proposed Voluntary National Test (VNT) during Spring 2000.

ADDITIONAL INFORMATION: Copies of this ICR may be obtained from Ray Fields, Assistant Director, National Assessment Governing Board, Suite 825, 800 North Capitol Street, NW., Washington, DC 20002. Telephone: (202) 357–0395; email: Ray\_Fields@ED.Gov. Deted: February 28, 2000. Roy Truby, Executive Director, National Assessment Governing Board. [FR Doc. 00-5072 Filed 3-1-00; 8:45 am] BILLING CODE 4000-01-M

#### DEPARTMENT OF EDUCATION

#### National Educational Research Policy and Priorities Board; Quarterly Meeting

AGENCY: National Educational Research Policy and Priorities Board; Education. ACTION: Notice of Meeting

SUMMARY: This notice sets forth the schedule and proposed agenda of a forthcoming quarterly meeting of the National Educational Research Policy and Priorities Board. Notice of this meeting is required under Section 10(a)(2) of the Federal Advisory Committee Act. This document is intended to notify the general public of their opportunity to attend the meeting. DATES: March 16, 2000.

TIME: 9 a.m. to 5 p.m.

LOCATION: Room 100, 80 F St., NW., Washington, DC 20208-7564.

FOR FURTHER INFORMATION CONTACT: Thelma Leenhouts, Designated Federal Official, National Educational Research Policy and Priorities Board, Washington, DC 20208-7564. Tel.: (202) 219-2065; fax (202) 219-1528; e-mail: Thelma\_Leenhouts@ed.gov, or nerpph@ed.gov. The main telephone number for the Board is (202) 208-0692. SUPPLEMENTARY INFORMATION: The National Educational Research Policy and Priorities Board is authorized by Section 921 of the Educational Research, Development, Dissemination, and Improvement Act of 1994. The Board works collaboratively with the Assistant Secretary for the Office of **Educational Research and Improvement** (OERI) to forge a national consensus with respect to a long-term agenda for educational research, development, and dissemination, and to provide advice and assistance to the Assistant Secretary in administering the duties of the Office. The meeting is open to the public. Individuals who will need accommodations for a disability in order to attend the meeting (i.e., interpreting services, assistive listening devices, materials in alternative format) should notify Thelma Leenhouts at (202) 219-2065 by no later than March 9. We will attempt to meet requests after this date, but cannot guarantee availability of the requested accommodation. The meeting site is accessible to individuals with disabilities.

11293

PARRIS N. GLENDENING, Governor HENRY A. VIRTS, D.V.M., Secretary



The Wayne A. Cawley, Jr. Building 50 HARRY S. TRUMAN PARKWAY ANNAPOLIS, MARYLAND 21401 Baltimore/Annapolis (410) 841-5700 Washington (301) 261-8106 Facsimile (410) 841-5914 MD Relay 1-800-735-2258 e-mail address http://www.mda.state.md.us

## STATE OF MARYLAND DEPARTMENT OF AGRICULTURE

July 27, 1998

Ms. Emily C. Rzemien Versar Task Manager Versar, Inc. 9200 Rumsey Road Columbia, MD 21045-1934

#### RE: Fort George G. Meade - Environmental Assessment

Dear Ms. Rzemien:

Thank you for the opportunity to review and comment on the above-referenced project. The Maryland Department of Agriculture has no comments regarding the proposed action.

Should you have any questions, do not hesitate to call me at 410/841-5880.

Sincerely,

Henry A. Virts, D.V.M. Secretary

HAV:mej



Parris N. Glendening Governor Maryland Department of Natural Resources Forest, Wildlife and Heritage Service Tawes State Office Building Annapolis, Maryland 21401

August 3, 1998

John R. Griffin Secretary

Carolyn D. Davis Deputy Secretary

Ms. Emily C. Rzemien Versar, Inc. 9200 Rumsey Road Columbia, MD 21045-1934

## RE: Future Activities Proposed for Fort George G. Meade as Described Within Current Master Plan, Anne Arundel County

Dear Ms. Rzemien:

The Wildlife and Heritage Division has no records for Federal or State rare, threatened or endangered plants or animals within any of the specified project sites. This statement should not be interpreted as meaning that no rare, threatened or endangered species are present. Such species could be present but have not been documented because an adequate survey has not been conducted or because survey results have not been reported to us.

Sincerely, Muthael E. Slattery CAB for

Michael E. Slattery, Director, Wildlife & Heritage Division

cc: R. Dintaman, DNR ER# 98.1091.aa

A-6

Telephone: <u>(410) 260-8540</u> DNR TTY for the Deaf: 410-974-3683



Parris N. Glendening Governor

## Maryland Department of Natural Resources ENVIRONMENTAL REVIEW

Tawes State Office Building Annapolis, Maryland 21401

August 5, 1998

Emily C. Rzemien Versar Task Manager Versar, Inc. 9200 Rumsey Road Columbia, MD 21045-1934

Dear Ms. Rzemien:

Thanks you for the opportunity to review and comment on the proposed action at Fort George G. Meade in preparation for development of an Environmental Assessment (EA) by the installation and the U.S. Army Corps of Engineers, Baltimore District. The proposed action has been reviewed by the various units of the Department. The following information is provided for your use in preparing the subject EA:

## Little Patuxent River

A portion of the main stem of the Little Patuxent River, could be impacted by activities that occur at Fort Meade. Little Patuxent River and its tributaries are classified as Use I waters. Use I waters are protected for water contact recreation and aquatic life.

#### Anadromous fish

Anadromous fish species, including white perch (<u>Morone americana</u>), yellow perch (<u>Perca flavescens</u>), and herring (<u>Alosa sp.</u>) have been documented spawning in the Little Patuxent River. These anadromous fish may also reach the lower portions of tributaries in the study area. All of these waters are considered to be sensitive habitats because of potential anadromous fish spawning in this area.

## Resident fish populations

A list of resident fish species (Table B1-4), which have been documented in the Little Patuxent River by our Maryland Biological Stream Survey project, is attached for your information. Tributaries in your study area, that have perennial flow, may support populations of many of these

DNR TTY for the Deaf: (410) 974-3683

Telephone:

John R. Griffin Secretary

Carolyn D. Davis Deputy Secretary Emily C. Rzemien August 5, 1998 Page 2

resident fish species. These species include the glassy darter (Etheostoma vitreum), a state threatened species. The potential presence of the glassy darter in the Little Patuxent River is significant, as discussed below. It is possible that this species could also be found in tributaries to the Little Patuxent River.

#### **Glassy Darter**

Historically, the glassy darter has only been documented in a few locations in Maryland. In 1988, the species was listed as "highly rare" by the Maryland Natural Heritage Program. After the species apparently disappeared from several of the sites where it was previously known to exist, the species was listed as "endangered extirpated" (no longer believed to exist in the State) in 1990. However, shortly after this listing, the species was found to still exist in Maryland, but in very limited populations.

Extensive surveys were conducted in 1991 by consultants to the Natural Heritage Program to search for the glassy darter in Maryland. The conclusion of a report submitted to the Program stated that only two populations of glassy darters were located in Maryland; one in the Little Patuxent River and the other in the Marshyhope Creek drainage to the Nanticoke River. In the Little Patuxent River, the glassy darter habitat was described as that reach of the river from Savage down stream to its confluence with the Patuxent River. Glassy darters were found to be relatively common in the Little Patuxent River immediately below the Fort Meade Dam at MD Route 198.

Because this species is known in only two small, unconnected locations in Maryland, its populations are not well suited to withstanding impacts to their habitat or recolonizing disturbed areas in the manner of some of the more common fish species. It is important that special precautions be taken to avoid impacts to the stream. Even very infrequent impacts to the stream could cause significant damage to the glassy darter population in Maryland.

#### Severn Run

Small headwater tributaries to Severn Run occur on the northeast side of the study area. Severn Run and its tributaries are designated as Use IV streams (stocked trout waters). Severn Run is stocked with adult rainbow trout each spring by our Department as part of a put-and-take recreational trout fishery. These trout are stocked and further disperse through most of the middle reaches of the stream. Based on stream temperature data collected in recent years, Severn Run appears to be strongly influenced by springs in some areas, which help keep water temperatures cool during the summer. Trout are not expected to be found in the extreme headwaters, however activities that impact the headwaters of Severn Run could affect this recreational fishery.

White perch (Morone americana) and yellow perch (Perca flavescens) have been documented spawning in the middle to lower reaches of Severn Run. Herring (Alosa sp.) have been documented

Emily C. Rzemien August 5, 1998 Page 3

spawning in the Severn River, downstream of Severn Run. These species are not expected to be present in the extreme headwaters near your project site, but potential instream impacts at your site could affect their downstream spawning habitat.

Our files do not contain data on the resident fish populations which exist in the Severn River headwaters in your study area. It is expected that the perennial reaches of tributaries support resident populations of several warm water species typically found in this region.

Thank you again for the opportunity to comment on the proposed activities at Fort George G. Meade. If you should have any questions concerning these comments, please call me at 410-260-8331.

Sincerely,

May C. Dintomon, p.

Ray C. Dintaman, Jr., Director Environmental Review Unit

RCD Attachment

Table B1-4. Fish species found in 1994 MBSS project sampling vs supplemental sampling, Patuxent Basin		
Fish Species	MBSS Study	Supplemental Sampling
AMERICAN BROOK LAMPREY	X	
AMERICAN EEL	X	X
BANDED KILLIFISH	X	X
BANDED SUNFISH	X	
BLACKNOSE DACE	X	X
BLUEGILL	X	$\mathbf{X}$ and $\mathbf{X}$ and $\mathbf{X}$ is the set of
BLUESPOTTED SUNFISH	X	X
BROWN BULLHEAD	X	X
BROWN TROUT		X
CENTRAL STONEROLLER		X
CHAIN PICKEREL	X	
CHANNEL CATFISH		X
COMMON SHINER		X
CREEK CHUB	X	X
CREEK CHUBSUCKER	X	x
CUTLIPS MINNOW	X	X
EASTERN MUDMINNOW	X	X
FALLFISH	X	X
FATHEAD MINNOW		X
GIZZARD SHAD		X
GLASSY DARTER	X	
GOLDEN SHINER	X	X
GREEN SUNFISH		X
LAMPREY	X	X
LARGEMOUTH BASS	X	X
LEAST BROOK LAMPREY		X
LEPOMIS	X	
LEPOMIS HYBRID		Χ
LONGNOSE DACE		X
MARGINED MADTOM	X <sup>a</sup> a the	X
MOSQUITOFISH	X	X and a
MUMMICHOG		X
NORTHERN HOGSUCKER		X
PIRATE PERCH	X X	X
POTOMAC SCULPIN		X
PUMPKINSEED	X	X
RAINBOW TROUT		X
REDBREAST SUNFISH	v *	

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#### LAND USE AND ENVIRONMENT OFFICE

HERITAGE OFFICE COMPLEX 2662 RIVA ROAD ANNAPOLIS, MARYLAND 21401

August 12, 1998

Ms. Emily C. Rzemien Versar, Inc. 9200 Rumsey Road Columbia, MD 21045-1934

#### Re: Environmental Assessment - Fort George G. Meade

Dear Ms. Rzemien:

This is in response to your letter to Mr. Thomas C. Andrews, dated July 17, 1998, which has been referred to my office for reply.

We have reviewed your letter and find that many of these uses near Route 175 in Odenton will complement the revitalization efforts that the County is currently pursuing with the business owners on the east side of Route 175. There are three important issues that the EA should recognize. First, the County and Fort Meade have been working together to plan the widening of Route 175 in North Odenton. This effort will necessitate securing an easement from the Fort to accomplish this plan.

Second, there is a joint planning project between the County and Fort Meade for a large senior housing project on the property presently owned by Fort Meade. This agreement calls for the Fort to convey the property to the County in exchange for an equal value of housing construction on base by the County for its military personnel. The EA should evaluate whether or not there will be any conflicts with the project on site 11.

Third, is the revitalization effort that the county is investing in for the North Odenton area. In order to maximize the economic development impact of these proposed activities, it is strongly recommended that these uses locate and be oriented as close to Route 175 as possible. This will tie the Fort Meade Community much closer to the Odenton community and provide the economic spinoff to the revitalized businesses across Route 175.

Enclosed is a copy of the planning documents prepared by the Anne Arundel County Planning and Code Enforcement Department for the Odenton Town Plan.

## A-11

Telephone: (410) 222-7502 Fax: (410) 222-7329

Ms. Emily C. Rzemien August 12, 1998 Page Two

In closing, we would be interested in knowing how the recent National Priorities Listing will affect the proposed timetables provided in your letter. We would anticipate significant delays caused by EPA if the EA's discover any potential or actual contamination at any of these parcels.

If you have any questions or need any further information, please do not hesitate to contact this office.

Sincerely,

Ramed / 2l

Ronald Nelson Land Use and Environment Officer

RN:bd rzemien.wpd

cc: Thomas Andrews



MARYLAND DEPARTMENT OF THE ENVIRONMENT 2500 Broening Highway • Baltimore Maryland 21224 (410) 631-4120

Parris N. Glendening Governor Jane T. Nishida Secretary

August 13, 1998

Ms. Emily C. Rzemien Versar, Inc. 9200 Rumsey Road Columbia MD 21045-1934

RE: MDE Identification Number: ES98-0723-0026 Project: Fort Meade Proposed Action

Dear Ms. Rzemien:

Thank you for the opportunity to review the above referenced project. The document was circulated throughout the Maryland Department of the Environment (MDE) for review, and the following comments are offered for your consideration.

- 1. If the applicant suspects that asbestos is present in any portion of the structure that will be renovated/demolished, then the applicant should contact Mr. Frank Whitehead, Community Environmental Services Program, Air and Radiation Management Administration at (410) 631-3215 to learn about the State's requirements for asbestos handling.
- 2. Construction, renovation and/or demolition of buildings and roadways must be performed in conformance with State regulations pertaining to "Particulate Matter from Materials Handling and Construction" (COMAR 26.11.06.03D), requiring that during any construction and/or demolition work, reasonable precaution must be taken to prevent particulate matter, such as fugitive dust, from becoming airborne.
- 3. If boilers or other equipment capable of producing emissions are installed as a result of this project, the applicant is requested to obtain a permit to construct from MDE's Air and Radiation Management Administration for this equipment, unless the applicant determines that a permit for this equipment is not required under State regulations pertaining to "Permits, Approvals, and Registration" (COMAR 26.11.02.). A review for toxic air pollutants should be performed. Please contact Dr. Justin Hsu, Ph.D., P.E., New Source Permits Division, Air and Radiation Management Administration at (410) 631-3230 to learn about the State's requirements and the permitting processes for such devices.

"Together We Can Clean Up"

TDD FOR THE DEAF (410) 631-3009

**Recycled Paper** 

Ms. Emily C. Rzemien August 13, 1998 Page Two

- 4. If soil contamination is present, a permit for soil remediation is required from MDE's Air and Radiation Management Administration. Please contact Dr. Justin Hsu, Ph.D., P.E., New Source Permits Division, Air and Radiation Management Administration at (410) 631-3230 to learn about the State's requirements for these permits.
- 5. The applicant is encouraged to plan for the maximum utilization of carpools and public transit by employees providing preferential carpool/vanpool parking and bus shelters for commuters that use these methods of transportation. This will minimize the adverse impact of additional traffic generated by the proposed project. Please contact the Mobile Sources Program, Air and Radiation Management Administration at (410) 631-3270 for additional information.
- 6. All x-ray machines in the State of Maryland must be registered. Please contact Mr. Thomas Ferguson, X-Ray Section, Air and Radiation Management Administration at (410) 631-3300 for additional information. Any person or institution that wants to acquire radioactive materials is required to possess a license. Please contact Mr. Carl Trump, Jr., Radioactive Materials Licensing Section, Air and Radiation Management Administration at (410) 631-3300 for additional information.
- 7. If a project receives federal funding, approvals and/or permits, and will be located in a nonattainment area or maintenance area for ozone or carbon monoxide, the applicant should determine whether emissions from the project will exceed the thresholds identified in the federal rule on general conformity. If the project emissions will be greater than 25 tons per year, contact James Wilkinson, Air and Radiation Management Administration, at (410) 631-3245 for further information regarding threshold limits.
- 8. Fossil fuel fired power plants emit large quantities of sulfur oxide and nitrogen oxides, which cause acid rain. In addition, nitrogen oxide emissions contribute to the problem of global warming and also combine with volatile organic compounds to form smog. The MDE supports energy conservation, which reduces the demand for electricity and therefore, reduces overall emissions of harmful air pollutants. For these reasons, MDE recommends that the builders use energy efficient lighting, computers, insulation and any other energy efficient equipment. Contact the U.S. EPA at (202) 233-9120 to learn more about the voluntary Green Lights Program which encourages businesses to install energy-efficient lighting systems.
- 9. The applicant should be advised that no cutback asphalt should be used during the months of June, July and August.
- 10. Lighting for security, athletic fields, and parking needs to be shielded from nearby residences.
- 11. Project should support resource conservation and pollution prevention through land use and transportation designs that provide alternatives to single occupant vehicle use.

Ms. Emily C. Rzemien August 13, 1998 Page Three

12. The Waste Management Administration's files contain extensive information regarding Fort Meade. It is recommended that you contact the programs individually:

Hazardous Waste Program	(410) 631-3343
Oil Control Program	(410) 631-3386
Solid Waste Program	(410) 631-3318
Environmental Restoration	
and Redevelopment Program	(410) 631-3437
Regulatory and Technical	
Assistance Program	(410) 631-3441

Again, thank you for giving MDE the opportunity to review this project. If you have any questions, please feel free to call me at (410) 631-3656.

Sincerely,

Leven Breber gm

Steven Bieber Clearinghouse Coordinator

cc: Secretary Jane Nishida



October 27, 1998

Maryland Department of Housing and Community Development

Division of Historical and Cultural Programs

100 Community Place Crownsville, Maryland 21032

410-514-7600 1-800-756-0119 Fax: 410-987-4071 Maryland Relay for the Deaf: 1-800-735-2258

http://www.dhcd.state.md.us

Parris N. Glendening Governor

Patricia J. Payne Secretary

Raymond A. Skinner Deputy Secretary Ms. Emily C. Rzemien Versar, Inc. 9200 Rumsey Road Columbia, Maryland 21045-1934

RE: Fort George G. Meade Anne Arundel County, MD

Dear Ms. Rzemien:

Thank you for providing this office with an opportunity to comment on future activities proposed at Fort George G. Meade. We understand that your firm is preparing an Environmental Assessment (EA) for these activities. We apologize for our tardy response. However, the Army will need to consult with the Trust for each undertaking in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended.

Your preliminary review of the *Fort George G. Meade Cultural Resources Management Plan* should greatly facilitate the Army's initiation of Section 106 review. The Plan identifies the architectural and archeological resources which have been determined eligible for the National Register of Historic Places. The Army has undertaken additional cultural resource investigations at the base. Reports are available to the public in the Trust's library. Please contact Ms. Mary Louise de Sarran, our librarian, at (410) 514-7655 to schedule an appointment. Our written correspondence and project files are also available for review upon request. The project files can be accessed by contacting me at (410) 514-7637.

Although it appears that the future undertakings are located outside the Post Core Historic District, this office would like to provide the following suggestions. Any rehabilitation of a historic building must be done in accordance with the Secretary of the Interior's *Standards for Rehabilitation*. Secondly, new construction within the historic district must be compatible with the existing historic architecture in scale, massing, and materials, as noted in the *Standards*.

Should you have any questions, please feel free to call me at the number above.

Sincerely,

Tur How

Lauren L. Bowlin Preservation Officer Project Review and Compliance

LLB/IIb/9802389 cc Mr. William Harmeyer





# United States Department of the Interior

FISH AND WILDLIFE SERVICE Chesapeake Bay Field Office 177 Admiral Cochrane Drive Annapolis, MD 21401



March 1, 1999

Emily Rzemien Versar, Inc. 9200 Rumsey Road Columbia, MD 21045

RE: Fort Meade Master Plan

Dear Ms. Rzemien:

This responds to your July 17, 1998, letter which we did not receive, and your subsequent fax of February 2, 1999, regarding the Fort Meade Master Plan. This letter constitutes the report of the Service and the Department of the Interior on the proposed project and is submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*), and Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

There are a number of Solid Waste Management Units on Fort Meade. Some discussion of how construction actions may affect these areas is warranted. There is currently a TCE ground water spill that is encroaching upon a wetland. It appears that a major impact could be erosion and sedimentation of the Fort's waterways due to the addition of runoff from impervious surfaces. In addition, this increased runoff could not only increase sedimentation, but also carry contamination from identified and unidentified SWMU's.

Except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist in areas of the proposed actions. Should additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Bob Zepp at (410)573-4536.

Sincerely, Robert J. Pennington

Assistant Field Supervisor Div. of Habitat Evaluation and Protection

# APPENDIX B REFERENCES

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## REFERENCES

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## **Additional Internet Information Sources**

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CDC Lead Information Site = <u>http://www.atsdr.cdc.gov/HEC/caselead.html</u> – August, 1999.

EPA CERCLA Information Sites = <u>http://www.superfund/</u> and <u>http://www.epa.gov/reg3hwmd/wuper/ftmead/pad.htm</u> – August, 1999.

EPA Office of Pesticide Programs Page = <u>http://www.epa.gov/pesticides/</u> and <u>http://www.epa.govopp00001/whatis.htm</u> – August, 1999.

EPA Sources of Information on Indoor Air Quality – Radon – www.epa.gov/iaq/radon/index.html – August, 1999.

Lead Home Page at EPA = <u>http://www.aeclp.org/2/lead101.html</u> and <u>http://www.epa.gov/opptintr/lead/index.html</u> – August, 1999.

MDE CERCLA Information Site = <u>http://www.mde.state.md.us/gw/gunpowder/cercla.htm</u> – August, 1999.

NRCS Internet Site = <u>http://www.wi.nrcs.usda.gov/soil/prime/prinotes.html</u> -- August, 1999.

OSHA Internet Site = <u>http://www.osha.gov</u> – August, 1999.

PCB Home Page at EPA = <u>http://www.epa.gov/opptintr/pcb/</u> – August, 1999.

Radon Research Center = <u>http://www.Sbu.ac.uk/rrc/sect1.html</u> – August, 1999.

The Superfund NPL Assessment Program (SNAP) Database – August 1999.

#### **Reference Materials**

Fort Meade Master Plan Review Map 1997.

Howard County General Land Use Plan Map 1990.



# **APPENDIX C**

# PUBLIC SCOPING MEETING MINUTES AND RELATED MATERIALS

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Jennifer Massagli and Mark Southerland Versar, Inc. May 15, 2000

#### **Summary of Fort Meade EIS Scoping Meeting**

For the purpose of the Environmental Impact Statement (EIS), a public information and scoping session for proposed future development and operations was held in the 8<sup>th</sup> Street Chapel at Fort George G. Meade, Maryland on April 20, 2000 from 1800 to 2100 hours. The public was invited to participate through advertisements in local newspapers.

**Format**. The public information and scoping session was organized as a workshop format with stations addressing the following topics:

- Proposed Action
- Potential Impacts
- Traffic
- Air Quality

Each station was staffed by an environmental impact assessment specialist and included visual and written information for the public (see attached handouts).

The Proposed Action station outlined the new construction activities expected to occur on Fort George G. Meade between 2000 and 2004. The description of the Proposed Action included construction projects typical of those that are currently implemented, since it is uncertain which specific actions will be implemented. A large map of Fort George G. Meade depicting the locations of each of the 11 projects was displayed.

The second station focused on potential impacts to Fort George G. Meade and the surrounding area. In April 1999, the U.S. Army published an Environmental Assessment (EA) of the future development and operations at Fort George G. Meade, which found that no significant impacts to environmental or socioeconomic resources with the exception of traffic and air quality would likely occur. Although no significant impacts to other resources were identified in the EA, potential impacts to all resources will be analyzed in EIS. Two large maps illustrating current and future land use at Fort George G. Meade were provided.

Two additional stations addressed traffic and air quality issues. Traffic issues were addressed in terms of the level of service at key intersections within the study area. Air quality issues addressed included temporary impacts from construction and demolition activities and permanent impacts from the operation of the new facilities and increased employee traffic. The relationship to Baltimore's severe non-attainment area status for ozone was discussed.

**Staffing**. The following ten individuals from the US Army Corp of Engineers-Baltimore District; Fort George G. Meade; Versar, Inc.; and the Traffic Group were available throughout the public information and scoping session to answer questions or address potential concerns:

USACE-Baltimore District

- Katherine Basye
- Dave Hand
- Vaso Karanikolis

#### Fort Meade Department of Public Works

- Jim Gebhardt, project manager
- Leayle Galiber, master planner

#### Versar

- Mark Southerland
- Lou Corio
- Claire Fox
- Jennifer Massagli

#### The Traffic Group

• Mike Lenhart

An interpreter from the Hearing and Speech Association of Maryland was available throughout the scoping session.

Attendees. The following members of the public attended the public information and scoping session:

- Mike Snylanski, Severn Small Area Planning Committee
- William Valenta, USARC
- Ray Ringgold, Delmott Implementation Association

**Comments**. Each of the attendees met with members of the EIS team and discussed issues informally. Only one written comment was received commending the meeting, while recommending additional advertisement about the project. Since no comments recommending new alternatives or analyses were received, the project is proceeding per an expedited schedule.

# **PUBLIC NOTICE**

# Public Information and Scoping Session Proposed Future Development and Operations

at Fort George G. Meade, Maryland

# Thursday, April 20, 2000 6:00 PM to 9:00 PM 8<sup>th</sup> Street Chapel 8<sup>th</sup> Street and Chisholm Avenue Fort Meade, Maryland

There will be a public information and scoping session on the proposed Future Development and Operations at Fort George G. Meade. An Environmental Impact Statement (EIS) will address the future development and operations of Fort Meade's Real Property Master Plan for the Years 2000-2004. The planned projects which would be expected to occur at this time include the following: construction of new facilities that would consolidate tenants from dilapidated World War II structures and off post leased facilities into more cost efficient and effective facilities, demolition and construction of barracks and mess halls, and the providing of on post development and Closure. It is the purpose of this EIS to further assess the environmental and socioeconomic impacts of the proposed projects, most specifically relating to air quality and increased traffic at Fort Meade, that were identified in the Environmental Assessment entitled "Future Development and Operations Environmental Assessment" dated April 1999.

The purpose of this public information and scoping session is to provide information on the future development and operations at Fort Meade, and to receive input to the EIS process from citizens and organizations. The public is encouraged to attend this session between the hours of 6:00 p.m. and 9:00 p.m. to provide comments, ideas, and suggestions. All comments received at this session will be evaluated and incorporated as appropriate into the EIS, and will be considered during the final decision-making process. The information session is open to the public and any interested persons are invited to attend.

Any questions pertaining to this public notice may be directed to Mr. Jim Gebhardt, Fort Meade Directorate of Public Works, Environmental Management Office, at (301) 677-9365.

Min Halmight

William Harmeyer Acting Chief, Environmental Management Office

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## **PUBLIC INFORMATION**

## AND

## **SCOPING SESSION**

## FOR

# PROPOSED FUTURE DEVELOPMENT AND OPERATIONS FORT GEORGE G. MEADE, MARYLAND

INFORMATION SHEETS AND COMMENT CARD

20 APRIL 2000 6:00-9:00PM 8<sup>TH</sup> STREET CHAPEL 8<sup>TH</sup> STREET AND CHISHOLM AVENUE FORT MEADE, MARYLAND





## **PROPOSED** ACTION

For the purpose of the Environmental Impact Statement (EIS), the Proposed Action includes new construction activities expected to occur on Fort George G. Meade between 2000 and 2004 as part of plans to further Fort Meade's mission as a Federal administrative center. Since it is uncertain which specific actions will actually be implemented within this time frame, the Proposed Action includes construction projects typical of those that are currently planned in the administration and support areas of the installation. The pertinent operations and maintenance activities associated with the Proposed Action will also be addressed in the EIS.

To provide the specificity needed for reasonable predictions of the environmental consequences, 11 projects were identified by the Fort Meade Master Planner for consideration within the Proposed Action as being representative of the expected build out by 2004.

Fort Meade planners estimate that approximately 900 individuals will be added to the post's working population. The projects will account for 270,381 square feet (SF) of additional administrative and support facilities. Below is a brief definition of each of the 11 projects included in the Proposed Action:

- Military Entrance Processing Station (MEPS) Construct a new 31,200-SF MEPS facility to replace the current leased off-post facility.
- <u>Personnel Barracks Replacement, Phase I</u> Construct a new 52,750-SF enlisted personnel barracks and soldier community building, and demolish existing barracks.
- Personnel Barracks Replacement Phase II Same as above.
- <u>Dining Facility</u> Construct a 24,500-SF, 1,300-person dining facility. This action would include demolition of 25,000-SF of World War II (WWII) temporary structures.
- <u>**Company Headquarters</u>** Construct two standard design, 8,300-SF company operation facilities. The action would replace and demolish company operations buildings.</u>
- <u>Battalion Operations</u> Construct a standard-design, 8,300-SF medium operations facility. Demolition of existing building is planned.
- **Bold Venture I** Construct a 34,000-SF administrative facility with general-purpose administrative space, reception, and orientation areas.
- **Bold Venture II** Construct an 80,000-SF administrative building for new occupants relocating to Fort Meade.
- **Bold Venture III** Construct a 34,000-SF administrative building for new occupants relocating to Fort Meade.
- **Bold Venture IV** Construct a 10,000-SF administrative building for new occupants relocating to Fort Meade.
- ♦ U.S. Army 1<sup>st</sup> Recruiting Brigade (1RBDE), Army Medical Detachment 1<sup>st</sup> Brigade, and <u>Baltimore Recruiting Battalion</u> - Construct a 40,000-SF administrative office building to replace offices in WWII wooden structures that will likely be demolished.





## POTENTIAL IMPACTS TO FORT MEADE AND THE SURROUNDING AREA

In April 1999, the U.S. Army published an Environmental Assessment (EA) of the Future Development and Operations at Fort Meade stating that no significant impacts were expected to any environmental or socioeconomic resources with the possible exception of air quality and traffic. The Environmental Impact Statement (EIS) being considered here will conduct more detailed analyses on these and all other potential impacts of the activities (updated to reflect current planning through 2004) described in the Proposed Action (see the Proposed Action information sheet). For more information on the analyses planned for potential air quality and traffic impacts see their respective information sheets.

Although no significant impacts to resources other than air quality and traffic were identified in the EA, potential impacts in the following areas will be analyzed in the EIS:

- Land use
- Air quality
- Water resources
- Aquatic resources and wetlands
- Vegetation
- ♦ Wildlife resources
- Threatened and endangered species
- Prime and unique farmlands
- Wild and scenic rivers
- Cultural resources
- Hazardous, toxic, and radioactive substances
- ♦ Infrastructure
- Traffic
- Socioeconomic conditions
- Environmental justice
- Cumulative impacts





## AIR QUALITY

In April 1999, the U.S. Army published an Environmental Assessment (EA) for future development and operations at Fort Meade stating that significant impacts to air quality potentially could occur. Potential air quality impacts identified in this EA included temporary impacts from the construction and demolition activities, and permanent impacts from operation of the new facilities, including operation of heating and cooling plants and increased employee traffic. The Environmental Impact Statement (EIS) being considered here will conduct more detailed analyses on the air emissions from the activities (updated to reflect current planning through 2004) described in the Proposed Action (see the Proposed Action information sheet).

As shown in the 1999 EA, Fort Meade is located in Anne Arundel County, which is part of the Baltimore severe nonattainment area for ozone. This means that the cumulative air quality problem in the region exceeds safe levels of ozone, as defined in the U.S. Environmental Protection Agency's (EPA) air quality standards. Conservative analysis of the cumulative effects on air as a result of construction and operation of the projects considered in the EA predicted a significant increase in air emissions from that Proposed Action.

Because Fort Meade is located within the severe nonattainment area, the Proposed Action being considered under the EIS must comply with EPA's General Conformity rule (40 CFR Part 51, Subpart W). The General Conformity rule states that proposed Federal actions must demonstrate conformity with the State Implementation Plan (SIP). The SIP is devised by the State of Maryland and approved by the U.S. EPA to bring areas currently not in compliance with National Ambient Air Quality Standards (NAAQS) back into compliance; thus, Federal actions must not adversely affect the timely attainment and maintenance of NAAQS or emission reduction plans leading to attainment.

The EIS will further investigate the air quality impacts and take appropriate measures to coordinate with the State on this issue.





## TRAFFIC

In April 1999, the U.S. Army published an Environmental Assessment (EA) for future development and operations at Fort Meade stating that significant impacts to traffic were likely to occur. The Environmental Impact Statement (EIS) being considered here will conduct more detailed analyses on the potential impacts to traffic of the activities (updated to reflect current planning through 2004) described in the Proposed Action (see the Proposed Action information sheet).

Fort Meade is located in the western portion of Anne Arundel County and comprises approximately 9,000 acres. Three major highways provide access around the perimeter of the installation as follows (see maps):

- The Baltimore-Washington Parkway (MD 295) is located just west of Fort Meade and provides north/south access between Baltimore and Washington, D.C. No heavy trucks are permitted on the Parkway south of MD 175.
- MD 175 borders the north and east of Fort Meade and provides for east/west travel between Columbia and Odenton. MD 175 provides access to other major roadways such as MD 32, the Baltimore-Washington Parkway, I-95, and US 29. MD 175 has a varying width that provides a two-lane roadway from MD 175 to Reece Road, then widens to a minimum four-lane roadway from Reece road to MD 32.
- MD 32 borders the southern portion of Fort Meade and provides for east/west travel from I-97, east of Odenton, to Howard County. In the vicinity of Fort Meade, MD 32 has a four-lane cross section and primarily functions as a freeway. However, at-grade signalized intersections are provided along the Fort Meade boundary at Mapes Road and MD 198. Interchanges are provided along MD 32, at both MD 175 and the Baltimore-Washington Parkway.

The major roadways providing access through Fort Meade include Rockenbach Road (which extends from MD 175 southerly to MD 32 through Fort Meade) and Mapes Road (which traverses east/west through Fort Meade between MD 175 and MD 32). Other State roadways providing access to the Fort Meade area include Ridge Road (MD 713), Reece Road (MD 174), and Laurel-Fort Meade Road (MD 198).

Direct access to Fort Meade is provided by several intersections along both MD 175 and MD 32. Traveling east along MD 175 from the Baltimore-Washington Parkway, access to Fort Meade is provided by Rockenbach Road, Reece Road, and Llewellyn Avenue. Access is provided on the southern boundary of Fort Meade by MD 32 at Emory Road (near the NSA facility) and from Mapes Road. The Proposed Action for this EIS includes 11 potential projects. Six of these are clustered along MD 175, near the intersection with Mapes Road and Llewellyn Avenue. The other five potential developments are located in the southwest portion of Fort Meade, south of Mapes Road in the vicinity of Zimborski Avenue and Taylor Avenue.

The impacts of the Proposed Action will be evaluated in more detail in the EIS based upon anticipated effects of the identified key intersections in the study area. To support this analysis, proposed road improvements will be reviewed that may effect the key intersections in the study area. Information from the State Highway Administration will be reviewed to identify future road improvements for the short-and long-term.

Place Stamp Here

US Army Corps of Engineers, Baltimore District ATTN: CENAB-PL-E / Karanikolis PO Box 1715 Baltimore, Maryland 21203-1715

Name:	Comments:
Organization (If Any):	
Address:	
``````````````````````````````````````	
Phone Number:	
Comment Card for Proposed Future Development and Operations at Ft. Meade, Maryland (EIS) 20 Apr 00 meeting.	
Directions	

- 1. Fill in the appropriate blanks for name, address, and phone number.
- 2. List any organization(s) your comments represent.
- 3. Write any additional comments in the space provided.
- 4. Place in the comment box, or stamp and mail the card.
- 5. Please return all comments within the next two weeks.

Thank you for your participation!

۰,



## APPENDIX D PUBLIC MEETING MINUTES

(Meeting to be held during public review period for the DEIS)



## **APPENDIX E**

## FORT MEADE PLANT AND ANIMAL SPECIES LIST



07/17/98

## List of Plants Collected at Fort Meade, 1993-1994

? - confirmation should be pursued

Equisetaceae

Equisetum arvense Equisetum pratense

Lycopodiaceae

Lycopodium obscurum Lycopodium clavatum

**Ophioglossaceae** 

Botrychium dissectum Botrychium virginianum

#### Osmundaceae

Osmunda cinnamomea Osmunda regalis

#### Polypodiaceae

Athyrium felix-femina Dennstaedtia punctilobula Onoclea sensibilis Pteridium aquilinum Thelypteris noveboracensis Woodwardia areolata Woodwardia virginica

#### Aslpeniaceae

Asplenium platyneuron

#### Dryopteridaceae

Dryopteris novaboracensis

### Typhaceae

Typha angustifolia Typha latifolia

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## Zosteraceae

Potamogeton crispus

Sparganiaceae

Sparganium americanum

#### Alismataceae

Alisma plantago-aquatica Sagittaria graminea Sagittaris latifolia

### Hydrocharitaceae

Elodea canadensis

#### Poaceae

Agrostis hymelis Agrostis perennans Aira caryophyllea Andropogon virginicus Bromus sterilis Calamagrostis cinnoides Dactylis glomerata Danthonia sericea Dichanthelium sp. Echinochloa walteri Echinochloa sp. Eragrostis capillaris Elymus virginicus Eragrostis sp. Festuca elatior Festuca myuros Festuca obtusa Festuca rubra Glyceria striata Glyceria obtusa Holcus lanatus Hordeum pusillum Hordeum vulgare Leersia oryzoides Leersia virginica Microstegium vimineum

Muhlenbergia frondosa Panicum clandestinum Panicum colubianum Panicum depauperatum Panicum dichotomiflorum Panicum dichotomum Panicum sp.(ensifolium?) Panicum leucothrix Panicum scoparium Phragmites australis Poa bulbosa Poa compressa Poa pratensis Setaria faberii Triodia flava Uniola laxa Vulpia octoflora

#### Cyperaceae

**Bulbostylus** capillaris Carex albolutescens Carex amphibola Carex atlantica Carex blanda Carex canescens Carex complanata var. hirsutella Carex crinita Carex debilis Carex emmonsii Carex sp.(festucacea?) Carex folliculata Cares frankii Carex hirsutella Carex sp.(intumescens/grayi?) Carex laevivaginata Carex leavenworthii Carex lupilina Carex lurida Carex nigromarginata Carex pensylvanica Carex rosea Carex scoparia Carex seorsa Carex stipata Carex straminea Carex stricta

## Cyperaceae cont'd

Carex swanii Carex tenuifolia Carex tonsa Carex tribuloides Carex trisperma Carex trisperma var. billingsii Carex umbellata Carex vulpinoidea Carex vulpinoidea var. ambigua Carex sp.(Montanae?) Cyperus esculentus Cyperus erythrorhizos Cyperus grayi Cyperus ovularis Cyperus retrorsus Cyperus strigosus Eleocharis ovata Eleocharis quadrangulata Eleocharis tenuis Scirpus atrovirens Scirpus cyperinus Scirpus validus

#### <u>Araceae</u>

Arisaema triphyllum Peltandra virginica Symplocarpus foetidus

#### **Xyridaceae**

Xyris caroliniana

#### Commelinaceae

Commelina communis Commelina virginica

#### Pontederiaceae

Pontederia cordata

#### Juncaceae

Juncus acuminatus Juncus candensis Juncus effusus

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Juncus sp.(megacephalus?) Juncus sp.(polycephalus?) Juncus scirpoides Juncus secundus Juncus tenuis Juncus tenuis var.dichotomus Juncus sp. Luzula bulbosa Luzula multiflora

#### Liliaceae

Allium vineale Mediola virginiana Ornithogalum umbellatum Smilacina racemosa Smilax rotundifolia Smilax glauca

## Dioscoreaceae

Dioscorea villosa

#### Amaryllidaceae

Hypoxis hirsuta

#### Iridaceae

Iris versicolor Sisyrinchium graminoides

#### Orchidaceae

Cypripedum acaule Isotria verticillata

#### Saururaceae

Saururus cernuus

## Cannabinaceae

Humulus japonicus

## <u>Urticaceae</u>

Boehmeria cylindrica Pilea pumila Urtica dioica

#### Santalaceae

Comandra umbellata

#### Aristolochiaceae

Asarum canadense

### Polygonaceae

Polygonum arifolium Polygonum cespitosum Polygonum hydropiperoides Polygonum pensylvanicum Polygonum perfoliatum Polygonum punctatum Polygonum sagittatum Rumex acetosella Rumex crispus Rumex obtusifolia Tovara virginiana

#### **Phytolaccaceae**

Phytolacca americana

## Caryophyllaceae

Arenaria serpyllifolia Cerastium arvense Cerastium semidecandrum Cerastium vulgatum Cerastium viscosum Dianthus armeria Dianthus barbatus Scleranthus annuus Silene stellata Spergula arvensis Stellaria graminea Stellaria longifolia Stellaria media

## Nymphaeaceae

#### Nymphaea odorata

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## Ranunculaceae

Caltha palustris Cimicifuga racemosa Clematis sp. Ranunculus abortivus Ranunculus scleratus Thalictrum sp.

#### Berberidaceae

Berberis japonica Podophyllum peltatum

#### Fumariaceae

Cordyalis flavula

#### Brassicaceae

Arabidopsis thaliana Alliaria officinalis Barbarea verna Barbarea vulgaris Brassica rapa Cardamine bulbosa Cardamine hirsuta Draba verna Hesperis matronalis Lepidium campestre Lepidium virginicum Teesdalia nudicaulis

### Rosaceae

Agrimonia parviflora Amelanchier canadensis Aronia arbutifolia Aronia prunifolia Cotoneaster sp. Duchesnea indica Geum canadense Geum virginianum Fragaria virginiana Potentilla argentea Potentilla arguta Potentilla recta Prunus serotina Pyrus communis Rosa multiflora Rubus argutus Rubus hispidus Sanguisorba minor

### Fabaceae

Amphicarpa bracteata Baptisia tinctoria Cercis canadensis Coronilla varia Desmodium sp.(marilandicum?) Desmodium nudiflorum Desmodium paniculatum Gleditsia triacanthos Lespedeza procumbens Lespedeza repens Lespedeza stuevei Lespedeza virginica(? hybrid) Medicago lupulina Melilotus alba Melilotus officinalis Stophostyles umbellata Trifolium arvense Trifolium pratense Vicia villosa

### Linaceae

Linum medium

Oxalidaceae

Oxalis stricta

#### Geraniaceae

Geranium carolinianum Geranium dissectum

#### Euphorbiaceae

Euphorbia corollata Euphorbia ipecacuanhae

## **Callitrichaceae**

Callitriche heterophylla

### Limnathaceae

Floerkea proserpinacoides

#### **Balsaminaceae**

Impatiens capensis Impatiens pallida

#### Clusiaceae

Hypericum gentianoides Hypericum mutillum Hypericum sp.(perforatum?) Hypericum virginicum Robinia psuedo-acacia

#### <u>Cistaceae</u>

Helianthemum canadense Helianthemum propinquum Lechea minor Lechea racemulosa

#### Violaceae

Viola arvensis Viola blanda Viola cucullata Viola kitaibeliana Viola papilionacea Viola primulifolia

#### Lytheraceae

Lythrum salicaria

#### Melastomataceae

Rhexia virginica

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### Onograceae

Epilobium sp. Ludwigia alternifolia Ludwigia palustris Oenothera perennis

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#### Haloragaceae

Myriophyllum aquaticum

## Umbellifereae

Cicuta maculata Daucus carota

#### **Pyrolaceae**

Chimaphila maculata Monotropa uniflora

#### Primulaceae

Anagallis arvensis Lysimachia quadrifolia Lysimachia ciliata Lysimachia nummularia

#### Apocynaceae

Apocynum cannabinum

#### Asclepiadaceae

Asclepias incarnata Asclepias tuberosa Asclepias syriaca

#### Convolvulaceae

Cuscuta gronovii

### Hydrophyllaceae

Hydrophyllum virginianum

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### Boraginaceae

Lithospermum arvense Myosotis arvensis Myosotis stricta

## <u>Verbenaceae</u>

Verbena hastata Verbena simplex Verbena stricta Verbena urticifolia

## Lamiaceae

Glechoma herderacea Lamium amplexicaule Lamium purpureum Lycopus americanus Lycopus virginicus Mentha spicata Perilla frutescens Scutellaria integrifolia Trichostema dichotomum

### Solanaceae

Solanum carolinense

#### Scrophulariaceae

Linaria canadensis Lindernia dubia Melampyrum lineare Mimulus alatus Mimulus ringens Scrophularia marilandica Verbascum blatteria Verbascum thapsus Veronica sp. Veronica officinalis

#### Orobanchaceae

Epifagus virginiana

## Lentibulariaceae

### Utricularia sp.

<u>Plantaginaceae</u>

Plantago lanceolata Plantago virginica

#### Rubiaceae

Cephalanthus occidentalis Diodia teres Galium aparine Galium triflorum Mitchella repens

#### Dipsacaceae

Dipsacus sylvestris

#### Campanulaceae

Echinocystis lobata Lobelia cardinalis Lobelia siphilitica Triodanis perfoliata

## Asteraceae

Achillea millefolium Ambrosia trifida Ambrosia artemisiifolia Antennaria neglecta Aster cordifolius Aster divaricata Aster ericoides Aster novae-angliae Aster patens Aster pilosus Aster puniceus Aster vimineus Bidens frondosa Bidens sp. Centurea maculosa Chrysanthemum leucanthemum Cichorium intybus Cirsium arvense Cirsium vulgare Conyza canadensis Eclipta alba Erigeron annuus

## Asteraceae cont'd

Eupatorium alba Eupatorium altissimum Eupatorium purpureum Eupatorium rotundifolium Eupatorium serotinum Eupatorium hyssopifolium Euthamia graminifolia Gnaphalium obtusifolium Helianthus divaricatus Hieracium gronovii Hypochaeris radicata Krigia virginica Lactuca canadensis Rudbeckia hirta Senecio anonymous Senecio sp. Solidaga altissima Solidago canadensis Solidago sp.(erecta?) Solidaga nemoralis Solidago odora Solidago sp.(puberula?) Solidago rugosa Taraxicum officinale Tussilago farfara Vernonia noveboracensis

#### Pinacea

Juniperus virginiana Pinus echinata Pinus resinosa Pinus strobus Pinus taeda Pinus virginiana

#### Salicaceae

Populus grandidentata Salix discolor Salix humilis Salix nigra

#### **Myricaceae**

Myrica pensylvanica

#### Juglandaceae

Juglans nigra Carya cordiformis Carya tomentosa

#### Betulaceae

Alnus serrulata Betula nigra Carpinus caroliniana Corylus americana

#### Fagaceae

Castanea dentata Castanea pumila Fagus grandiflora Quercus alba Quercus bicolor Quercus coccinea Quercus falcata Quercus falcata Quercus marilandica Quercus palustris Quercus phellos Quercus rubra Quercus velutina

**Ulmaceae** 

Ulmus rubra

Moraceae Morus rubra

#### Magnoliaceae

Magnolia virginica Liriodendron tulipifera

#### Annonaceae

## Asimina triloba

#### Lauraceae

Lindera benzoin Sassafras albidum

## Saxifagaceae

Itea virginica

#### Hamamelidaceae

Hamamelis virginiana Liquidambar styracflua

#### Platanaceae

Platanus occidentalis

#### Simaroubaceae

Ailanthus altissima

#### Anacardiaceae

Rhus copallina Rhus glabra Rhus typhina Toxicodendron radicans

#### Aquifoliaceae

Ilex laevigata Ilex opaca Ilex verticillata

## Celastraceae

Celastrus scandens Euonymus americanus

#### <u>Aceraceae</u>

Acer negundo Acer platanoides Acer rubrum Acer saccharinum

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## Vitaceae

Parthenocissus quinquefolia Vitis aestivalis Vitis vulpina

## Nyssaceae

Nyssa sylvatica

## Araliaceae

Aralia nudicaulis Aralia spinosa

#### Cornaceae

Cornus amomum Cornus florida

#### Clethraceae

Clethra alnifolia

## Ericaceae

Gaylussacia baccata Gaylussacia frondosa Kalmia angustifolia Kalmia latifolia Leucothoe racemosa Lyonia ligustrina Lyonia mariana Rhododendron atlanticum Rhododendron periclymenoides Rhododendron viscosum Vaccinium augustifolium Vaccinium corymbosum

## Ebenaceae

Diospyros virginiana

## Oleaceae

Chionanthus virginicus Fraxinus pennsylvanica

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## Caprifoliaceae

Lonicera japonica Sambucus canadensis Viburnum dentatum Viburnum nudum Viburnum prunifolium

## List of Bird Species Observed or Heard at Fort George G. Meade

September-October 1993, April-August 1994

Butorides striatus - Green heron Ardea herodias - Great blue heron Branta canadensis - Canada goose Anas platyrhynchos - Mallard Aix sponsa - Wood duck Cathartes aura - Turkey vulture Coragyps atratus -Black vulture Accipiter striatus - Sharp-shinned hawk Buteo jamaicensis - Red-tailed hawk Buteo lineatus - Red-shouldered hawk Buteo platypterus - Broad-winged hawk Haliaeetus leucocephalus - Bald eagle Pandion haliaetus - Osprey Falco sparverius - American kestrel Charadrius vociferus - Killdeer Philohela minor - American woodcock Actitis macularia - Spotted sandpiper Larus delawarensis - Ring-billed gull Zenaida macroura - Mourning dove Columba livia - Rock dove Coccyzus americanus - Yellow-billed cuckoo Bubo virginianus - Great horned owl Chaetura pelagica - Chimney swift Megaceryle alcyon - Belted kingfisher Colaptes auratus - Common flicker Dryocopus pileatus - Pileated woodpecker Melanerpes carolinus - Red-bellied woodpecker Picoides villosus - Hairy woodpecker Picoides pubescens - Downy woodpecker Tyrannus tyrannus - Eastern kingbird Myiarchus crinitus - Great crested flycatcher Sayornis phoebe - Eastern phoebe Empidonax virescens - Acadian flycatcher Contopus virens - Eastern pewee Hirundo rustica - Barn swallow Stelgidopteryx ruficollus - Rough-winged swallow Cyanocitta cristata - Blue jay Corvus brachyrhynchos - American crow Parus carolinensis - Carolina chickadee

Parus bicolor - Tufted titmouse Sitta carolinensis - White breasted nuthatch Certhia familiaris - Brown creeper Thryothorus ludovicianus - Carolina wren Mimus polyglottos - Northern mockingbird Dumetella carolinensis - Gray catbird Toxostoma rufum - Brown thrasher Turdus migratorius American robin Hylocichla mustelina - Wood thrush Sialia sialis - Eastern bluebird Polioptila caerulea - Blue-gray gnatcatcher Sturnus vulgaris - European starling Vireo griseus - White-eyed vireo Vireo olivaceus - Red-eyed vireo Mniotilta varia - Black and white warbler Parula americana - Northern parula warbler Dendroica petechia - Yellow warbler Dendroica pinus - Pine warbler Seiurus aurocapillus - Ovenbird Geothlypis trichas - Common yellowthroat Icteria virens - Yellow breasted chat Passer domesticus - House sparrow Sturnella magna - Eastern meadowlark Agelaius phoeniceus - Red-winged blackbird Icterus spurius - Orchard oriole Quiscalus quiscula - Common grackle Molothrus ater - Brown-headed cowbird Piranga olivacea - Scarlet tanager Cardinalis cardinalis - Northern cardinal Passerina cyanea - Indigo bunting Carduelis flammea - House finch Carduelis tristis - American goldfinch Spizella passerina - Chipping sparrow Melospiza georgiana - Swamp sparrow Melospiza melodia - Song sparrow Pipilo erythrophthalmus - Rufous-sided towhee

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## Fish Identified at Fort George G. Meade 1992 - 1994

Alosa aestivalis - Blueback herring Anguilla rostrata - American eel Catostomus commersoni - White sucker Cyprinella analostana - Satinfin shiner Dorosoma cepedianum - Gizzard shad Enneacanthus gloriosus - Bluespotted sunfish Erimyzon oblongus - Creek chubsucker Etheostoma olmstedi - Tessellated darter Etheostoma vitreum - Glassy darter Fundulus heteroclitus - Mummichog Exoglossum maxillingua - Cutlips minnow Hypentelium nigricans - Northern hogsucker Lampetra aepyptera - Least brook lamprey Lampetra appendix - American brook lamprey Lepomis auritus - Redbreast sunfish Lepomis gibbosus - Pumpkinseed Lepomis macrochirus - Bluegill Micropterus dolomieu - Smallmouth bass Micropterus salmoides - Largemouth bass Notropis amoenus - Comely shiner Notropis procne - Swallowtail shiner Percina peltata - Shield darter Rhinichthys atratulus - Blacknose dace Rhinichthys cataractae - Longnose dace Semotilus corporalis - Fallfish Umbra pygmaea - Eastern mudminnow

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## APPENDIX F AIR EMISSIONS



## APPENDIX F-1 EMISSIONS FROM CONSTRUCTION AND DEMOLITION VEHICLES



Estimated Emissions from Construction Vehicles for Proposed Action Projects									
	Bldg Area		Est	imated Emissions (t	py)				
<b>Proposed Action</b>	(ft <sup>2</sup> )	NO <sub>x</sub>	VOC	СО	SO <sub>2</sub>	PM			
Mil. Ent. Pro. Stn.	31,179	1.45	0.09	0.60	0.14	0.09			
Brrcks Rep. Ph. I	108,540	5.04	0.33	2.07	0.48	0.32			
Brrcks Rep. Ph. II	108,540	5.04	0.33	2.07	0.48	0.32			
Bold Ven. Init. I	34,000	1.58	0.10	0.65	0.15	0.10			
Bold Ven. Init. II	80,000	3.72	0.24	1.53	0.35	0.24			
Dining Facility	24,456	1.14	0.07	0.47	0.11	0.07			
Company HQ	8,316	0.39	0.03	0.16	0.04	0.02			
Battalion Ops.	8,316	0.39	0.03	0.16	0.04	0.02			
Bold Ven. Init. III	34,000	1.58	0.10	0.65	0.15	0.10			
Bold Ven. Init. IV	10,000	0.46	0.03	0.19	0.04	0.03			
USA 1st Recr. Brg.	40,114	1.86	0.12	0.77	0.18	0.12			

1. Conservatively assumed that it takes one bulldozer, one excavator, one loader, and two dump trucks four days to grade one acre;

therefore, a total of approximately 40 days are needed to complete grading.

2. Assumed that a crane and a forklift are needed to move/set steel framework and cinderblocks for 100 working days.

3. Emissions for each proposed action were calculated by multiplying the estimated DSS project emission rate (BRAC, 1995) for each pollutant by the ratio of the building area for each action to the DSS building area.

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Estimated Emissions from Demolition Vehicles for Proposed Action Projects									
	<b>Demolition Area</b>		Est	imated Emissions (t	py)				
<b>Proposed Action</b>	(ft <sup>2</sup> )	NO <sub>x</sub>	VOC	CO	SO <sub>2</sub>	PM			
Mil. Ent. Pro. Stn.	ND	0	0	0	0	0			
Brrcks Rep. Ph. I	115,500	0.41	0.03	0.17	0.04	0.02			
Brrcks Rep. Ph. II	115,500	0.41	0.03	0.17	0.04	0.02			
Bold Ven. Init. I	ND	0	0	0	0	0			
Bold Ven. Init. II	ND	0	0	0	0	0			
Dining Facility	25,000	0.20	0.01	0.08	0.02	0.01			
Company HQ	8,000	0.20	0.01	0.08	0.02	0.01			
Battalion Ops.	9,278	0.20	0.01	0.08	0.02	0.01			
Bold Ven. Init. III	ND	0	0	0	0	0			
Bold Ven. Init. IV	ND	0	0	0	0	0			
USA 1st Recr. Brg.	12,630	0.20	0.01	0.08	0.02	0.01			

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## F-6 Notes:

1. Demolition operation includes two bulldozers, one loader, and two dump trucks for one week for demolition projects less than 50,000 ft<sup>2</sup>,

and two weeks for demolition projects greater than  $50,000 \text{ ft}^2$ . 2. ND - No demolition activities assumed for these projects.

Estimated Emissions from Construction Vehicles for Alternative Action Projects									
	Bldg Area		Est	imated Emissions (t	py)				
<b>Proposed Action</b>	(ft <sup>2</sup> )	NO <sub>x</sub>	VOC	CO	SO <sub>2</sub>	PM			
Mil. Ent. Pro. Stn.	31,179	1.45	0.09	0.60	0.14	0.09			
Brrcks Rep. Ph. I	108,540	5.04	0.33	2.07	0.48	0.32			
Brrcks Rep. Ph. II	108,540	5.04	0.33	2.07	0.48	0.32			
Bold Ven. Init. I	34,000	1.58	0.10	0.65	0.15	0.10			
Bold Ven. Init. II	80,000	3.72	0.24	1.53	0.35	0.24			
Dining Facility	24,456	1.14	0.07	0.47	0.11	0.07			
Company HQ	8,316	0.39	0.03	0.16	0.04	0.02			
Battalion Ops.	8,316	0.39	0.03	0.16	0.04	0.02			
USA 1st Recr. Brg.	40,114	1.86	0.12	0.77	0.18	. 0.12			

1. Conservatively assumed that it takes one bulldozer, one excavator, one loader, and two dump trucks four days to grade one acre;

therefore, a total of approximately 40 days are needed to complete grading.

2. Assumed that a crane and a forklift are needed to move/set steel framework and cinderblocks for 100 working days.

3. Emissions for each proposed action were calculated by multiplying the estimated DSS project emission rate (BRAC, 1995) for each pollutant by the ratio of the building area for each action to the DSS building area.

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Estimated Emissions from Demolition Vehicles for Alternative Action Projects									
	<b>Demolition Area</b>		Est	imated Emissions (t	py)				
<b>Proposed Action</b>	(ft <sup>2</sup> )	NO <sub>x</sub>	VOC	CO	SO <sub>2</sub>	PM			
Mil. Ent. Pro. Stn.	ND	0	0	0	0	0			
Brrcks Rep. Ph. I	115,500	0.41	0.03	0.17	0.04	0.02			
Brrcks Rep. Ph. II	115,500	0.41	0.03	0.17	0.04	0.02			
Bold Ven. Init. I	ND	0	0	0	0	0			
Bold Ven. Init. II	ND	0	0	0	0	0			
Dining Facility	25,000	0.20	0.01	0.08	0.02	0.01			
Company HQ	8,000	0.20	0.01	0.08	0.02	0.01			
Battalion Ops.	9,278	0.20	0.01	0.08	0.02	0.01			
USA 1st Recr. Brg.	12,630	0.20	0.01	0.08	0.02	0.01			

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1. Demolition operation includes two bulldozers, one loader, and two dump trucks for one week for demolition projects less than 50,000 ft<sup>2</sup>,

and two weeks for demolition projects greater than  $50,000 \text{ ft}^2$ .

2. ND - No demolition activities assumed for these projects.

Estimated Emissions from Construction Vehicles for Other Actions									
	Bldg Area		Est	imated Emissions (t	py)				
<b>Proposed Action</b>	(ft <sup>2</sup> )	NO <sub>x</sub>	VOC	СО	SO <sub>2</sub>	РМ			
Information Systems									
Software Center	1								
(ISSC)	NC	0	0	0	0	o			
Defense Security									
Services (DSS)	75,654	3.52	0.23	1.45	0.33	0.22			
U.S. Army Reserve	1								
Center (USARC)	143,857	6.69	0.44	2.75	0.63	0.43			
Library of Congress	1	· · · · · · · · · · · · · · · · · · ·							
Storage facility	24,000	1.12	0.07	0.46	0.11	0.07			
Anne Arundel									
Community College	1								
Extension Campus	110,050	5.11	0.33	2.10	0.48	0.33			
Family Travel Camp	9,480	0.44	0.03	0.18	0.04	0.03			
CIDC	6,400	0.30	0.02	0.12	0.03	0.02			

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1. Conservatively assumed that it takes one bulldozer, one excavator, one loader, and two dump trucks four days to grade one acre;

therefore, a total of approximately 40 days are needed to complete grading.

2. Assumed that a crane and a forklift are needed to move/set steel framework and cinderblocks for 100 working days.

3. Emissions for each proposed action were calculated by multiplying the estimated DSS project emission rate (BRAC, 1995) for each pollutant

by the ratio of the building area for each action to the DSS building area. 4. NC - Renovation project; no exterior construction.

Estimated Emissions from Demolition Vehicles for Other Actions								
	<b>Demolition</b> Area		Est	timated Emissions (t	py)			
<b>Proposed Action</b>	(ft <sup>2</sup> )	NO <sub>x</sub>	VOC	СО	SO <sub>2</sub>	PM		
Information Systems								
Software Center								
(ISSC)	ND	0	0	0	0	0		
Defense Security								
Services (DSS)	ND	0	0	0	0	0		
U.S. Army Reserve								
Center (USARC)	ND	0	0	0	0	0		
Library of Congress								
Storage facility	ND	0	0	0	0	0		
Anne Arundel								
Community College								
Extension Campus	ND	0	0	0	0	0		
Family Travel Camp	ND	0	0	0	0	0		
CIDC	ND	0	0	0	0	0		
Notes:								

1. Demolition operation includes two bulldozers, one loader, and two dump trucks for one week for demolition projects less than 50,000 ft<sup>2</sup>,

and two weeks for demolition projects greater than  $50,000 \text{ ft}^2$ . 2. ND - No demolition activities assumed for these projects.

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## Estimated Emissions from Demolition/Construction Vehicles

The following emission factors (lb/hr) are from Volume II of AP-42, Table II-7.1, for heavy-duty diesel-powered construction equipment.

Equipment	NO <sub>x</sub>	VOC	<u>CO</u>	SO <sub>2</sub>	РМ
Bulldozer	4.166	0.192	1.794	0.348	0.165
Loader	1.89	0.25	0.572	0.182	0.172
Excavator	1.691	0.152	0.675	0.143	0.139
Truck	4.166	0.192	1.794	0.454	0.256
Crane	1.691	0.152	0.675	0.143	0.139
Forklift	1.691	0.152	0.675	0.143	0.139
<b>Demolition Operations</b>					
For demolition areas less than 50	,000 ft <sup>2</sup> :				
5 da	ys/yr x	8 hrs/da	ay =		40 hrs/yr
For demolition areas greater than	50.000 ft <sup>2</sup> :				
10 da	ys/yr x	8 hrs/da	ay =		80 hrs/yr
		Esti	mated Emissions (tpy)		1002
Equipment	NO <sub>x</sub>	VOC	<u>CO</u>	SO <sub>2</sub>	<u>PM</u>
2 Bulldozers	0.08	0.004	0.04	0.007	0.003
1 Loader	0.04	0.005	0.01	0.004	0.003
2 Dump Trucks	0.08	0.004	0.04	0.009	0.005
5-Day Total:	0.20	0.01	0.08	0.02	0.01
10-Dav Total:	0.41	0.03	0.17	0.04	0.02

Construction Operations (Data for the DSS project was used as the basis for calculating emissions for the construction projects)

#### Grading (see Notes below)

	40 days/yr x		8 hrs/day	= .			320 hrs/yr
			Estimated	l Emissions (tpy)			
<b>Equipment</b>	<u>NO</u> <sub>x</sub>	VOC		<u>CO</u>	SO <sub>2</sub>	<u>PM</u>	
Bulldozer	0.6	7	0.03	0.29	0.06		0.03
Loader	0.3	0	0.04	0.09	0.03		0.03
Excavator	0.2	7	0.02	0.11	0.02		0.02
2 Dump Trucks	1.3	3	0.06	0.57	0.15		0.08
Te Te	otal: 2.5	7	0.16	1.06	0.25		0.16
Building (Exterior) (see)	Notes below)						
	100 days/yr x		8 hrs/day	· · · · · · · · · · · · · · · · · · ·			800 hrs/yr
			Estimated	l Emissions (tpy)			
Equipment	<u>NOx</u>	VOC		<u>co</u>	$\underline{SO_2}$	PM	
Crane	0.6	8	0.06	0.27	0.06		0.06
Forklift	0.2	7	0.01	0.11	0.02		0.01
Т	otal: 0.9	4	0.07	0.38	0.08		0.07

0.23

1.45

0.33

0.22

#### Notes:

Grdg+Bldg Total:

1. Assumed that the area graded for the DSS project is 9 acres (as given in Appendix C of the BRAC 95 document)

2. Conservatively assumed that it takes one bulldozer, one excavator, one loader, and two dump trucks four days to grade one acre;

therefore, a total of approximately 40 days needed to complete grading

3. Assumed that a crane is needed to move/set steel framework for 100 working days

4. Assumed that a forklift is needed to move masonry materials (cinderblock, etc.) for 100 working days

3.52

5. Assumed that a work day consists of 8 hours

6. For AP-42 bulldozer emission factors, assumed a wheeled bulldozer

7. For AP-42 loader emission factors, assumed wheeled loader

8. For AP-42 excavator, crane, and forklift emission factors, assumed miscellaneous equipment category

9. Emissions for each proposed action were calculated by multiplying the estimated DSS project emission rate (BRAC, 1995) for each pollutant

by the ratio of the building area for each action to the DSS building area.

10. DSS building area is 75,654 ft<sup>2</sup>.

## APPENDIX F-2 FUGITIVE PM EMISSIONS FROM CONSTRUCTION/DEMOLITION ACTIVITIES



<b>Estimated Fugitive PM Emissions Associated with</b>										
<b>Demolition/Construction of Proposed Action Projects</b>										
PM Emissions (tpy)										
Proposed	<b>Demolition</b> Area	<b>New Bldg Area</b>	Dem	olition	Consti	uction				
Action	(ft <sup>2</sup> )	(ft <sup>2</sup> )	Dismantling	<b>Debris Loading</b>	Earth Moving	Wind Erosion				
Mil. Ent. Pro. Stn.	ND	31,179	0	0	2.58	0.39				
Brrcks Rep. Ph. I	115,500	108,540	0.003	0.05	8.97	1.37				
Brrcks Rep. Ph. II	115,500	108,540	0.003	0.05	8.97	1.37				
Bold Ven. Init. I	ND	34,000	0	0	2.81	0.43				
Bold Ven. Init. II	ND	80,000	0	0	6.61	1.01				
Dining Facility	25,000	24,456	0.001	0.01	2.02	0.31				
Company HQ	8,000	8,316	0.0002	0.004	0.69	0.11				
Battalion Ops.	9,278	8,316	0.0002	0.004	0.69	0.11				
Bold Ven. Init. III	ND	34,000	0	0	2.81	0.43				
Bold Ven. Init. IV	ND	10,000	0	0	0.83	0.13				
USA 1st Recr. Brg.	12,630	40,114	0.0003	0.006	3.32	0.51				

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Notes:

1. Dismantling and debris loading PM emissions determined using emission factors from U.S. EPA Fugitive Dust Background Document (EPA 1992).

2. Earth moving and wind erosion PM emissions determined using emission factors from U.S. EPA, AP-42, Section 13.2.3.

3. ND - No demolition activities assumed for these projects.

Estimated Fugitive PM Emissions Associated with										
<b>Demolition/Construction of Alternative Action Projects</b>										
				PM Emiss	ions (tpy)					
Proposed	<b>Demolition</b> Area	New Bldg Area	Dem	olition	Constr	uction				
Action	(ft <sup>2</sup> )	(ft <sup>2</sup> )	Dismantling	<b>Debris</b> Loading	Earth Moving	Wind Erosion				
Mil. Ent. Pro. Stn.	ND	31,179	0	0	2.58	0.39				
Brrcks Rep. Ph. I	115,500	108,540	0.003	0.05	8.97	1.37				
Brrcks Rep. Ph. II	115,500	108,540	0.003	0.05	8.97	1.37				
Bold Ven. Init. I	ND	34,000	0	0	2.81	0.43				
Bold Ven. Init. II	ND	80,000	0	0	6.61	1.01				
Dining Facility	25,000	24,456	0.001	0.01	2.02	0.31				
Company HQ	8,000	8,316	0.0002	0.004	0.69	0.11				
Battalion Ops.	9,278	8,316	0.0002	0.004	0.69	0.11				
USA 1st Recr. Brg.	12,630	40,114	0.0003	0.006	3.32	0.51				

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Notes:

1. Dismantling and debris loading PM emissions determined using emission factors from U.S. EPA Fugitive Dust Background Document (EPA 1992).

2. Earth moving and wind erosion PM emissions determined using emission factors from U.S. EPA, AP-42, Section 13.2.3.

3. ND - No demolition activities assumed for these projects.
|                     | <b>Estimated Fugitive PM Emissions Associated with</b> |                    |             |                       |              |              |  |  |  |  |  |  |
|---------------------|--------------------------------------------------------|--------------------|-------------|-----------------------|--------------|--------------|--|--|--|--|--|--|
|                     | Den                                                    | nolition/Cons      | truction of | Other Action          | ns           |              |  |  |  |  |  |  |
|                     |                                                        |                    |             | PM Emiss              | ions (tpy)   |              |  |  |  |  |  |  |
| Proposed            | <b>Demolition</b> Area                                 | New Bldg Area      | Dem         | olition               | Constr       | uction       |  |  |  |  |  |  |
| Action              | (ft <sup>2</sup> )                                     | (ft <sup>2</sup> ) | Dismantling | <b>Debris</b> Loading | Earth Moving | Wind Erosion |  |  |  |  |  |  |
| Information Systems |                                                        |                    |             |                       |              |              |  |  |  |  |  |  |
| Software Center     |                                                        |                    |             |                       |              |              |  |  |  |  |  |  |
| (ISSC)              | ND                                                     | NC                 | 0           | 0                     | 0            | 0            |  |  |  |  |  |  |
| Defense Security    |                                                        |                    |             |                       |              |              |  |  |  |  |  |  |
| Services (DSS)      | ND                                                     | 75,654             | 0           | 0                     | 6.25         | 0.96         |  |  |  |  |  |  |
| U.S. Army Reserve   |                                                        |                    |             |                       |              |              |  |  |  |  |  |  |
| Center (USARC)      | ND                                                     | 143,857            | 0           | 0                     | 11.89        | 1.82         |  |  |  |  |  |  |
| Library of Congress |                                                        |                    |             |                       |              |              |  |  |  |  |  |  |
| Storage facility    | ND                                                     | 24,000             | 0           | 0                     | 1.98         | 0.30         |  |  |  |  |  |  |
| Anne Arundel        |                                                        |                    |             |                       |              |              |  |  |  |  |  |  |
| Community College   |                                                        |                    |             |                       |              |              |  |  |  |  |  |  |
| Extension Campus    | ND                                                     | 110,050            | 0           | 0                     | 9.10         | 1.39         |  |  |  |  |  |  |
| Family Travel Camp  | ND                                                     | 9,480              | 0           | 0                     | 0.78         | 0.12         |  |  |  |  |  |  |
| CIDC                | ND                                                     | 6,400              | 0           | 0                     | 0.53         | 0.08         |  |  |  |  |  |  |

Notes:

1. Dismantling and debris loading PM emissions determined using emission factors from U.S. EPA Fugitive Dust Background Document (EPA 1992).

2. Earth moving and wind erosion PM emissions determined using emission factors from U.S. EPA, AP-42, Section 13.2.3.

3. NC - Renovation only, no exterior construction activities.

4. ND - No demolition activities assumed for these projects.

#### **EXAMPLE CALCULATIONS FOR BARRACKS REPLACEMENT PHASE I**

**Construction Emissions** 

Assumptions

	terror and the second se								
		Building Size:	108,540 ft2						
		Earth Moving	•						
		Emission Factor:	1.2 tor	1/acre/n	onth (from AP-42, S	ection 13.2.3.3)			
		Control Efficiency:	85%						
		Wind Erosion							
		Emission Factor:	0.11 tor	1/acre/n	onth				
		Control Efficiency:	75%						
		Construction Area:	5 tin	nes size	of building size				
		Time of Construction:	4 m	onths (b	ased on DSS project)				
		Construction area:	108,540 ft		x	0.000023 acre/ft	x	5 _	12.5 00000
				,				_	12.5 deres
	Annual Emission Esti	mate							
		Earth Moving:	8.97 tpy	y					
		Wind Erosion:	1.37 tpy	y					
Dana 1842 and Frankania									
Demonution Emissions									
	Accumutions								
	Assumptions	Demolition Area:	115 500 82	,					
		Demontling Emission	115,500 112						
		Factor:	0.00025 kg	/m?					
		Debris I cading	0.00025 Kg	/1112					
		Emission Factor:	0.0046 kg	/m2					
				, <b>.</b>					
		115,500 ft2	x		0.092903 m2/ft2	=	10,	730 m2	
			-						
	Annual Emission Esti	mate							
		Dismantling:	2.68 kg	g∕yr x		0.0011023 t/kg	=		0.0030 tpy
		Debris Loading:	49.36 kg	g∕yr x		0.0011023 t/kg	===		0.0544 tpy
		. –							

### APPENDIX F-3 EMISSIONS FROM NATURAL GAS-FIRED BOILERS



···· · · · · · · · · · · · · · · · · ·	Estimated Annual Emissions from New Natural Gas-Fired Boilers for Proposed Action Projects													
	Estimated					· · ·	1							
Proposed Action	Gas Use	PN	<u>л</u>	SO <sub>2</sub>		NC	NO <sub>x</sub>		СО		VOC		Lead	
	(ft <sup>3</sup> )	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy	
Mil. Ent. Pro. Stn.	1,714,062	13.03	0.0065	1.03	0.0005	171.41	0.09	143.98	0.07	9.43	0.0047	0.0009	0.000000	
Brrcks Rep. Ph. I	5,966,975	45.35	0.0227	3.58	0.0018	596.70	0.30	501.23	0.25	32.82	0.0164	0.0030	0.000001	
Brrcks Rep. Ph. II	5,966,975	45.35	0.0227	3.58	0.0018	596.70	0.30	501.23	0.25	32.82	0.0164	0.0030	0.000001	
Bold Ven. Init. I	1,869,146	14.21	0.0071	1.12	0.0006	186.91	0.09	157.01	0.08	10.28	0.0051	0.0009	0.000000	
Bold Ven. Init. II	4,397,992	33.42	0.0167	2.64	0.0013	439.80	0.22	369.43	0.18	24.19	0.0121	0.0022	0.000001	
Dining Facility	1,344,466	10.22	0.0051	0.81	0.0004	134.45	0.07	112.94	0.06	7.39	0.0037	0.0007	0.000000	
Company HQ	457,171	3.47	0.0017	0.27	0.0001	45.72	0.02	38.40	0.02	2.51	0.0013	0.0002	0.000000	
Battalian Ops.	457,171	3.47	0.0017	0.27	0.0001	45.72	0.02	38.40	0.02	2.51	0.0013	0.0002	0.000000	
Bold Ven. Init. III	1,869,146	14.21	0.0071	1.12	0.0006	186.91	0.09	157.01	0.08	10.28	0.0051	0.0009	0.000000	
Bold Ven. Init. IV	549,749	4.18	0.0021	0.33	0.0002	54.97	0.03	46.18	0.02	3.02	0.0015	0.0003	0.000000	
USA 1st Recr. Brg.	40,114	0.30	0.0002	0.02	0.0000	4.01	0.002	3.37	0.00	0.22	0.0001	0.0000	0.000000	

Notes:

Assumptions made in estimating gas use for the new boilers are provided on the following page.
PM is expressed as total PM (sum of filterable & condensible).
The following emission factors are from Volume I of AP-42, Supplement D, Tables 1.4-1, 1.4-2, and 1.4-3, for natural gas combustion, small boilers (<100 MMBtu/hr heat input):</li>

SO <sub>2</sub> :	0.6 lb/10° ft <sup>3</sup>
NO <sub>x</sub> :	100 lb/10 <sup>6</sup> ft <sup>3</sup>
CO:	84 lb/10 <sup>6</sup> ft <sup>3</sup>
VOC:	5.5 lb/10 <sup>6</sup> ft <sup>3</sup>
PM:	7.6 lb/10 <sup>6</sup> ft <sup>3</sup>
Lead:	$0.0005 \text{ lb}/10^6 \text{ ft}^3$

			and the second se			·							
Proposed Action	Estimated Gas Use	PI	M	sc	02	NC	D <sub>x</sub>	C	0	vo	DC	Le	ad
	(ft <sup>3</sup> )	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy
Mil. Ent. Pro. Stn.	1,714,062	13.03	0.0065	1.03	0.0005	171.41	0.09	143.98	0.07	9.43	0.0047	0.0009	0.000000
Brrcks Rep. Ph. I	5,966,975	45.35	0.0227	3.58	0.0018	596.70	0.30	501.23	0.25	32.82	0.0164	0.0030	0.000001
Brrcks Rep. Ph. II	5,966,975	45.35	0.0227	3.58	0.0018	596.70	0.30	501.23	0.25	32.82	0.0164	0.0030	0.000001
Bold Ven. Init. I	1,869,146	14.21	0.0071	1.12	0.0006	186.91	0.09	157.01	0.08	10.28	0.0051	0.0009	0.000000
Bold Ven. Init. II	4,397,992	33.42	0.0167	2.64	0.0013	439.80	0.22	369.43	0.18	24.19	0.0121	0.0022	0.000001
Dining Facility	1,344,466	10.22	0.0051	0.81	0.0004	134.45	0.07	112.94	0.06	7.39	0.0037	0.0007	0.000000
Company HQ	457,171	3.47	0.0017	0.27	0.0001	45.72	0.02	38.40	0.02	2.51	0.0013	0.0002	0.000000
Battalian Ops.	457,171	3.47	0.0017	0.27	0.0001	45.72	0.02	38.40	0.02	2.51	0.0013	0.0002	0.000000
USA 1st Recr. Brg.	40,114	0.30	0.0002	0.02	0.0000	4.01	0.002	3.37	0.00	0.22	0.0001	0.0000	0.000000

Notes:

Assumptions made in estimating gas use for the new boilers are provided on the following page.
PM is expressed as total PM (sum of filterable & condensible).
The following emission factors are from Volume I of AP-42, Supplement D, Tables 1.4-1, 1.4-2, and 1.4-3, for natural gas combustion, small boilers (<100 MMBtu/hr heat input):</li>

SO <sub>2</sub> :	0.6 lb/10 <sup>6</sup> ft <sup>3</sup>
NO <sub>x</sub> :	100 lb/10 <sup>6</sup> ft <sup>3</sup>
CO:	84 lb/10 <sup>6</sup> ft <sup>3</sup>
VOC:	5.5 lb/10 <sup>6</sup> ft <sup>3</sup>
PM:	7.6 lb/10 <sup>6</sup> ft <sup>3</sup>
Lead:	$0.0005 \text{ lb}/10^6 \text{ ft}^3$

]	Estimated Annual Emissions from New Natural Gas-Fired Boilers from Other Actions												
Proposed Action	Estimated Gas Use	 PN	4	SC	$D_2$	N(	O <sub>x</sub>	С	со		C	Le	
	(ft <sup>3</sup> )	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy	lb/yr	tpy
Information Systems Software Center (ISSC)	NB	0	0	0	0	0	0	0	0	0	0	0	0
Defense Security Services (DSS)	4,159,071	31.61	0.0158	2.50	0.0012	415.91	0.21	349.36	0.17	22.87	0.0114	0.0021	0.000001
U.S. Army Reserve Center (USARC)	7,908,524	60.10	0.0301	4.75	0.0024	790.85	0.40	664.32	0.33	43.50	0.0217	0.0040	0.000002
Library of Congress Storage facility	1.319,398	10.03	0.0050	0.79	0.0004	131.94	0.07	110.83	0.06	7.26	0.0036	0.0007	0.000000
Anne Arundel Community College Extension													
Campus	6,049,987	45.98	0.0230	3.63	0.0018	605.00	0.30	508.20	0.25	33.27	0.0166	0.0030	0.000002
Family Travel Camp	NB	0	0	0	0	0	0	0	0	0	0	0	C
CIDC	351,839	2.67	0.0013	0.21	0.0001	35.18	0.02	29.55	0.01	1.94	0.0010	0.0002	0.000000

Notes:

1. Assumptions made in estimating gas use for the new boilers are provided on the following page.

2. PM is expressed as total PM (sum of filterable & condensible).

3. The following emission factors are from Volume I of AP-42, Supplement D, Tables 1.4-1, 1.4-2, and 1.4-3, for natural gas combustion, small boilers (<100 MMBtu/hr heat input):

		$0 \in 1b/10^6 \oplus^3$
	SU <sub>2</sub> :	0.6 10/10 11
	NO <sub>x</sub> :	100 lb/10 <sup>6</sup> ft <sup>3</sup>
	CO:	84 lb/10 <sup>6</sup> ft <sup>3</sup>
	VOC:	5.5 lb/10 <sup>6</sup> ft <sup>3</sup>
	PM:	7.6 lb/10 <sup>6</sup> ft <sup>3</sup>
	Lead:	0.0005 lb/10 <sup>6</sup> ft <sup>3</sup>
4.	NB - These facilities	will not have a new boiler.

#### Estimation of Natural Gas Requirements for New Boilers

According to BRAC 95 document, the Proposed Action for realigning the ESSD and SDC-W to Fort Meade (known as the ISSC in the current EIS) involved renovation of a total of approximately  $64,000 \text{ ft}^2$ .

Proposed action for realigning the DSS to Fort Meade is construction of a new building of approximately 80,000 ft<sup>2</sup>.

Estimated natural gas usage for ESSD/SDC-W is 3,098,742 ft<sup>3</sup>, while natural gas usage for DSS is 4,922,556 ft<sup>3</sup>.

Ratio of gas use to building area:

ESSD & SDC-W:	3,098,742 /	64,000	48.4
DSS:	4,922,556 /	80,000	<u>61.5</u>

Average

55

			-		
					Estimated Gas
Project	New Building Area	F	Ratio of Gas Use	to	Requirements for New
	(ft <sup>2</sup> )		<b>Building</b> Area		Heating Boilers (ft <sup>3</sup> )
Mil. Ent. Pro. Stn.	31,179	x	55	=	1,714,062
Brrcks Rep. Ph. I	108,540	x	55	=	5,966,975
Brrcks Rep. Ph. II	108,540	x	55	=	5,966,975
Bold Ven. Init. I	34,000	x	55	=	1,869,146
Bold Ven. Init. II	80,000	x	55	=	4,397,992
Dining Facility	24,456	x	55	=	1,344,466
Company HQ	8,316	x	55	-	457,171
Battalion Ops.	8,316	x	55	=	457,171
Bold Ven. Init. III	34,000	х	55	=	1,869,146
Bold Ven. Init. IV	10,000	x	55	=	549,749
USA 1st Recr. Brg.	40,114	x	55	=	2,205,263
Information Systems					
Software Center					
(ISSC)	no new boiler	x	55	=	0
Defense Security					
Services (DSS)	75654	x	55	=	4,159,071
U.S. Army Reserve					
Center (USARC)	143857	x	55	=	7,908,524
Library of Congress					
Storage facility	24000	x	55	=	1,319,398
Anne Arundel					
Community College					
Extension Campus	110050	х	55	H	6,049,987
Family Travel Camp	no new boiler	x	55	=	0
CIDC	6400	x	55		351,839

## APPENDIX F-4 EMISSIONS FROM NEW COMMUTER AUTOMOBILES



#### **Proposed/Alternative Actions Emissions Summary**

	2000		2	2001		2002	2003		
	Increase		Increase		Increase		Increase		
Pollutant	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage	
NOx	0.00	0.00%	0.27	0.10%	0.29	0.11%	3.79	1.46%	
VOC	0.00	0.00%	0.12	0.14%	0.13	0.15%	1.35	1.73%	
CO	0.00	0.00%	0.81	0.12%	0.90	0.14%	8.59	1.43%	

#### Annual Emissions Increase due to Proposed Action (tons per year)

	2	.004	2	.005	2020				
	Increase		Increase		Increase				
Pollutant	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage			
NOx	13.43	5.26%	13.78	5.56%	10.64	4.28%			
VOC	4.68	6.17%	4.84	6.51%	4.01	5.04%			
CO	29.95	5.10%	31.80	5.40%	27.64	4.26%			

#### Annual Emissions Increase due to Alternative Action (tons per year)

	2	.000	2	2001	2	2002	2003			
	Increase		Increase		Increase		Increase			
Pollutant	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage		
NOx	0.00	0.00%	0.27	0.10%	0.29	0.11%	3.79	1.46%		
VOC	0.00	0.00%	0.12	0.14%	0.13	0.15%	1.35	1.73%		
CO	0.00	0.00%	0.81	0.12%	0.90	0.14%	8.59	1.43%		

-	2	004	2	005	2020				
	Increase		Increase		Increase				
Pollutant	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage			
NOx	9.95	3.90%	9.49	3.83%	7.32	2.94%			
VOC	3.47	4.58%	3.34	4.49%	2.76	3.48%			
CO	22.24	3.79%	21.96	3.73%	19.09	2.95%			

#### **Cumulative Emissions Summary**

	2	000	2	2001	2	2002	2003			
	Increase		Increase		Increase	ncrease				
Pollutant	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage		
NOx	0.00	0.00%	10.67	4.00%	16.26	6.20%	18.89	7.26%		
VOC	0.00	0.00%	3.79	4.44%	5.72	6.99%	6.51	8.31%		
CO	0.00	0.00%	26.28	3.97%	37.68	5.93%	41.99	6.98%		

#### Annual Emissions Increase due to Proposed Action and Other Actions (tons per year)

	2	2004	2	005		2020
	Increase		Increase		Increase	
Pollutant	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage
NOx	27.48	10.76%	26.70	10.78%	18.04	7.25%
VOC	9.44	12.45%	9.30	12.50%	6.79	8.55%
CO	61.05	10.40%	61.44	10.42%	46.62	7.19%

#### Annual Emissions Increase due to Alternative Action and Other Actions (tons per year)

	2	000	2	.001	2	2002	2003			
	Increase	icrease			Increase		Increase			
Pollutant	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage		
NOx	0.00	0.00%	10.67	4.00%	16.26	6.20%	18.89	7.26%		
VOC	0.00	0.00%	3.79	4.44%	5.72	6.99%	6.51	8.31%		
CO	0.00	0.00%	26.28	3.97%	37.68	5.93%	41.99	6.98%		

	2	.004	2	2005	2020					
	Increase		Increase		Increase					
Pollutant	(tpy)	Percentage	(tpy)	Percentage	(tpy)	Percentage				
NOx	23.99	9.40%	22.40	9.04%	14.73	5.92%				
VOC	8.23	10.86%	7.80	10.48%	5.55	6.99%				
CO	53.33	9.08%	51.60	8.75%	38.08	5.88%				

### **Regional Commuting Emissions\***

Assume 250 business/commuting days per year Assume MOBILE5b emission factors for 50 mph Assume each commuter travels a daily total distance of

25 miles

#### **Proposed Action**

		Year														
	2000	2001	2002	2003	2004	2005	2020									
No. of New Commuters	0	0	0	~210	800	862	862									
NOx (tpy)	0.00	0.00	0.00	2.49	9.15	9.38	7.25									
VOC (tpy)	0.00	0.00	0.00	0.82	2.98	3.09	2.55									
CO (tpy)	0.00	0.00	0.00	4.92	18.13	19.30	16.75									

#### **Alternative Action**

				Year			
	2000	2001	2002	2003	2004	2005	2020
No. of New Commuters	0	0	0	210	590	590	590
NOx (tpy)	0.00	0.00	0.00	2.49	6.75	6.42	4.96
VOC (tpy)	0.00	0.00	0.00	0.82	2.19	2.11	1.75
CO (tpy)	0.00	0.00	0.00	4.92	13.37	13.21	11.46

#### Other Actions (add to cumulative emissions summary table)

		Year														
	2000	2001	2002	2003	2004	2005	2020									
No. of New Commuters	0	296	746	746	746	746	746									
NOx (tpy)	0.00	3.69	9.05	8.84	8.53	8.12	6.27									
VOC (tpy)	0.00	1.28	3.08	2.93	2.78	2.67	2.21									
CO (tpy)	°0.00	7.75	18.55	17.47	16.91	16.70	14.49									

\* Emissions associated with commuter travel beyond the roads in and immediately around Fort Meade

Average Daily Traffic (ADT) by Segment and Year

	1999	2000	2	001	2	002	2	D <b>03</b>		2004			2005			2020	
•		No	No	Proposed	No	Proposed		Proposed		Proposed	Alternative	No	Proposed	Alternative	No	Proposed	Alternative
Segment	Baseline	Action	Action	Action	Action	Action	No Action	Action	No Action	Action	Action	Action	Action	Action	Action	Action	Action
1 MD 175 (BW Parkway to Rockenbach Road)	27,700	28,390	29,100	29,170	29,830	29,900	30,580	30,920	31,340	32,380	32,100	32,120	33,260	32,880	45,000	46,140	45,760
2 MD 175 (Rockenbach Road to Mapes Road)	21,700	22,240	22,800	22,860	23,370	23,430	23,950	24,290	24,550	25,960	25,580	25,160	26,660	26,190	36,450	37,950	37,480
3 MD 175 (Mapes Road to MD 32)	26,400	27,060	27,740	27,800	28,430	28,490	29,140	29,430	29,870	30,970	30,680	30,620	31,790	31,430	44,340	45,510	45,150
4 Mapes Road (MD 175 to Ernie Pyle Street)	8,080	8,080	8,080	8,140	8,080	8,140	8,080	8,500	8,080	8,500	8,500	8,080	8,600	8,500	8,080	8,600	8,500
5 Mapes Road (Ernie Pyle Street to Cooper Avenue)	11,180	11,180	11,180	11,250	11,180	11,250	11,180	11,530	11,180	12,040	11,860	11,180	12,110	11,860	11,180	12,110	11,860
6 Mapes Road (Cooper Avenue to MD 32)	12,730	12,730	12,730	12,800	12,730	12,800	12,730	13,080	12,730	13,850	13,580	12,730	13,920	13,580	12,730	13,920	13,580
7 Route 32 (MD 198 to Emory Road)	35,000	36,050	36,050	36,090	37,130	37,170	38,240	38,470	39,390	40,130	39,950	40,570	41,360	41,130	67,000	67,790	67,560
8 Route 32 (Mapes Road to MD 198)	52,000	53,560	53,560	53,630	55,170	55,240	56,830	57,180	58,530	59,650	59,380	60,290	61,480	61,140	89,000	90,190	89,850
9 Route 32 (Mapes Road to MD 175)	46,000	47,380	47,380	47,380	48,800	48,800	50,260	50,260	51,770	51,770	51,770	53,320	53,320	53,320	81,000	81,000	81,000
10 Reece Road (MD 175 to Emie Pyle Street)	7,300	7,300	7,300	7,400	7,300	7,400	7,300	7,670	7,300	7,670	7,670	7,300	7,740	7,670	7,300	7,740	7,670
11 Llewelyn Avenue (MD 175 to Emie Pyle Street)	6,380	6,380	6,380	6,380	6,380	6,380	6,380	6,380	6,380	8,180	7,540	6,380	8,180	7,540	6,380	8,180	7,540
12 Llewelyn Avenue (Ernie Pyle Street to Cooper Avenue)	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	4,790	5,050	4,960	4,790	5,050	4,960	4,790	5,050	4,960
13 Emie Pyle Street (Llewelyn Avenue to Mapes Road)	2,530	2,530	2,530	2,530	2,350	2,530	2,530	2,530	2,530	3,040	2,860	2,530	3,040	2,860	2,530	3,040	2,860
14 Emie Pyle Street (Mapes Road to Reece Road)	1,400	1,400	1,400	1,490	1,400	1,490	1,400	1,770	1,400	1,770	1,770	1,400	1,840	1,770	1,400	1,840	1,770
15 BW Parkway (MD 175 to NSA exit)	84,000	84,050	84,100	84,120	84,150	84,170	84,200	84,310	84,250	84,620	84,530	84,300	84,710	84,580	85,000	85,410	85,280
16 Rockenbach Road (MD 175 to Cooper Avenue)	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
17 Cooper Avenue (Rockenbach Road to Mapes Road)	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200
18 Taylor Avenue (South of Mapes Road)	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300	2,300

ADT for Other Actions Included																	
	1999	2000	2	001	2	002	2(	003		2004			2005			2020	
		No	No	Proposed	No	Proposed		Proposed		Proposed	Alternative	No	Proposed	Alternative	No	Proposed	Alternative
Segment	Baseline	Action	Action	Action	Action	Action	No Action	Action	No Action	Action	Action	Action	Action	Action	Action	Action	Action
1 MD 175 (BW Parkway to Rockenbach Road)	27,700	28,390	29,890	29,960	31,050	31,120	31,800	32,140	32,560	33,680	33,400	33,340	34,560	34,180	45,000	46,220	45,840
2 MD 175 (Rockenbach Road to Mapes Road)	21,700	22,240	23,630	23,690	24,440	24,500	25,020	25,360	25,620	27,030	26,650	26,240	27,740	27,270	36,450	37,950	37,840
3 MD 175 (Mapes Road to MD 32)	· 26,400	27,060	28,450	28,510	29,350	29,410	30,060	30,350	30,790	31,890	31,600	31,540	32,710	32,350	44,340	45,510	45,150
4 Mapes Road (MD 175 to Ernie Pyle Street)	8,080	8,080	9,220	9,280	9,220	9,280	9,220	9,640	9,220	9,640	9,640	9,220	9,740	9,640	9,220	9,740	9,640
5 Mapes Road (Ernie Pyle Street to Cooper Avenue)	11,180	11,180	11,680	11,750	11,680	11,750	11,680	12,030	11,680	12,800	12,530	11,680	12,870	12,530	11,680	12,870	12,530
6 Mapes Road (Cooper Avenue to MD 32)	12,730	12,730	13,740	13,810	13,960	14,030	13,960	14,310	13,960	15,080	14,810	13,960	15,150	14,810	13,960	15,150	14,810
7 Route 32 (MD 198 to Emory Road)	35,000	36,050	37,840	37,880	38,830	38,870	39,770	40,000	40,740	41,480	41,300	41,730	42,520	42,290	67,000	67,790	67,560
8 Route 32 (Mapes Road to MD 198)	52,000	53,560	56,180	56,250	57,620	57,690	59,020	59,370	60,450	61,570	61,300	61,920	63,110	62,770	89,000	90,190	89,850
9 Route 32 (Mapes Road to MD 175)	46,000	47,380	48,800	48,800	49,750	49,750	50,990	50,990	52,250	52,250	52,250	53,560	53,560	53,560	81,000	81,000	81,000
10 Reece Road (MD 175 to Ernie Pyle Street)	7,300	7,300	7,300	7,350	7,340	7,390	7,340	7,520	7,340	7,520	7,520	7,340	7,570	7,520	7,340	7,570	7,520
11 Llewelyn Avenue (MD 175 to Ernie Pyle Street)	6,380	6,380	6,880	6,880	6,880	6,880	6,880	6,880	6,880	7,650	7,380	6,880	7,650	7,380	6,880	7,650	7,380
12 Llewelyn Avenue (Ernie Pyle Street to Cooper Avenue)	4,790	4,790	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290	5,290
13 Emie Pyle Street (Llewelyn Avenue to Mapes Road)	2,530	2,530	2,530	2,530	2,530	2,530	2,530	2,530	2,530	3,300	3,030	2,530	3,300	3,030	2,530	3,300	3,030
14 Emie Pyle Street (Mapes Road to Reece Road)	1,400	1,400	1,400	1,470	1,400	1,470	1,400	1,750	1,400	1,750	1,750	1,400	1,790	1,750	1,400	1,790	1,/30
15 BW Parkway (MD 175 to NSA exit)	84,000	84,050	84,220	84,240	84,700	84,720	84,750	84,860	84,800	85,170	85,080	84,850	85,260	85,130	85,000	85,410	85,280
16 Rockenbach Road (MD 175 to Cooper Avenue)	12,000	12000	12270	12270	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450	12450
17 Cooper Avenue (Rockenbach Road to Mapes Road)	7200	7200	7470	7470	7580	7580	7580	7580	7580	7580	7580	7580	7580	7580	7580	7580	7580
18 Taylor Avenue (South of Mapes Road)	2300	2300	2300	2300	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430

## **Road Segment Information**

		Lei	ngth	Speed
	<b>Road Segment Description</b>	(Feet)	(Miles)	(mph)
1	MD 175 (BW Parkway to Rockenbach Road)	5118	0.9693	45
2	MD 175 (Rockenbach Road to Mapes Road)	10437	1.9767	45
3	MD 175 (Mapes Road to MD 32)	4921	0.9320	39
4	Mapes Road (MD 175 to Ernie Pyle Street)	1494	0.2830	33
5	Mapes Road (Ernie Pyle Street to Cooper Avenue)	4408	0.8348	33
6	Mapes Road (Cooper Avenue to MD 32)	6348	1.2023	33
7	Route 32 (MD 198 to Emory Road)	4828	0.9144	60
8	Route 32 (Mapes Road to MD 198)	1086	0.2057	50
9	Route 32 (Mapes Road to MD 175)	13478	2.5527	61
10	Reece Road (MD 175 to Ernie Pyle Street)	1124	0.2129	29
11	Llewelyn Avenue (MD 175 to Ernie Pyle Street)	1733	0.3282	30
12	Llewelyn Avenue (Ernie Pyle Street to Cooper Avenue)	3755	0.7112	30
13	Ernie Pyle Street (Llewelyn Avenue to Mapes Road)	1803	0.3415	25
14	Ernie Pyle Street (Mapes Road to Reece Road)	3102	0.5875	25
15	BW Parkway (MD 175 to NSA exit)	9198	1.7420	60
16	Rockenbach Road (MD 175 to Cooper Avenue)	6928	1.3121	44
17	Cooper Avenue (Rockenbach Road to Mapes Road)	4856	0.9197	30
18	Taylor Avenue (South of Mapes Road)	3715	0.7036	25

### EXAMPLE CALCULATION: Estimating the Proposed Action NO<sub>x</sub> Emission Increase in 2001 for Road Segment No. 1

Length of road segment no. 1:	0.9693 mi
Avg. speed of vehicles on this segment:	45 mph
MOBILE5b $NO_x$ emission factor for 45 mph in 2001:	1.68 g/mi
ADT associated with Proposed Action plus baseline in 2001:	29,170 trips/day
ADT associated with baseline (i.e., No Action) in 2001:	29,100 trips/day

Annual NO<sub>x</sub> Emissions (tons per year, or tpy) for <u>Proposed Action Plus no Action</u> in 2001

Total daily miles:	(0.9693 mi) x (29,170 trips/day) = 28,275 mi/day
Total daily emissions:	(28,275 mi/day) x (1.68 g/mi) = 47,502 g/day

 $(47,502 \text{ g/day}) \ge (1.1025 \times 10^{-6} \text{ ton/g}) \ge (250 \text{ day/yr}) = 13.09 \text{ tpy}$ 

#### Annual NO<sub>x</sub> Emission (tpy) for <u>No Action</u> in 2001

Total daily miles:	(0.9693 mi) x (29,100 trips/day) = 28,207 mi/day
Total daily emissions:	(28,207 mi/day) x (1.68 g/mi) = 47,388 g/day

 $(47,388 \text{ g/day}) \ge (1.1025 \times 10^{-6} \text{ tons/g}) \ge (250 \text{ day/yr}) = 13.06 \text{ tpy}$ 

#### Incremental Increase in NO<sub>x</sub> Emissions for Road Segment No. 1 from <u>Proposed Action Alone</u> in 2001

13.09 typ - 13.06 tpy = 0.03 tpy

#### **MOBILE5b Output by Road Segment**

						Emission	s (g/mile)					
Road		1999		2000				2001			2002	
Segment	NOx	VOC	CO	NOx	VOC	СО	NOx	VOC	СО	NOx	VOC	CO
1	1.94	0.89	5.57	1.82	0.79	5.18	1.68	0.66	4.04	1.63	0.63	3.85
2	1.94	0.89	5.57	1.82	0.79	5.18	1.68	0.66	4.04	1.63	0.63	3.85
3	1.88	0.97	6.37	1.75	0.87	6.00	1.62	0.73	4.70	1.57	0.69	4.50
4	1.84	1.09	7.58	1.72	0.97	7.19	1.59	0.82	5.66	1.54	0.77	5.44
5	1.84	1.09	7.58	1.72	0.97	7.19	1.59	0.82	5.66	1.54	0.77	5.44
6	1.84	1.09	7.58	1.72	0.97	7.19	1.59	0.82	5.66	1.54	0.77	5.44
7	2.77	0.92	8.12	2.59	0.82	7.37	2.39	0.68	5.62	2.31	0.64	5.29
8	2.10	0.85	5.29	1.97	0.75	4.89	1.81	0.63	3.80	1.76	0.60	3.61
9	2.86	0.94	8.68	2.67	0.83	7.86	2.46	0.69	5.99	2.38	0.65	5.62
10	1.84	1.20	8.72	1.72	1.07	8.30	1.59	0.89	6.55	1.54	0.85	6.31
11	1.84	1.17	8.40	1.72	1.04	7.99	1.59	0.87	6.31	1.54	0.83	6.07
12	1.84	1.17	8.40	1.72	1.04	7.99	1.59	0.87	6.31	1.54	0.83	6.07
13	1.85	1.33	10.22	1.73	1.18	9.78	1.60	0.99	7.75	1.55	0.94	7.47
14	1.85	1.33	10.22	1.73	1.18	9.78	1.60	0.99	7.75	1.55	0.94	7.47
15	2.77	0.92	8.12	2.59	0.82	7.37	2.39	0.68	5.62	2.31	0.64	5.29
16	1.93	0.90	5.98	1.80	0.80	5.30	1.66	0.67	4.13	1.62	0.64	3.94
17	1.84	1.17	8.40	1.72	1.04	7.99	1.59	0.87	6.31	1.54	0.83	6.07
18	1.85	1.33	10.22	1.73	1.18	9.78	1.60	0.99	7.75	1.55	0.94	7.47

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	Emissions (g/mile)											
Road		2003		2004				2005	· · · ·	2020		
Segment	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO
1	1.59	0.60	3.63	1.53	0.57	3.51	1.47	0.55	3.47	1.13	0.45	3.02
2	1.59	0.60	3.63	1.53	0.57	3.51	1.47	0.55	3.47	1.13	0.45	3.02
3	1.53	0.65	4.26	1.48	0.62	4.11	1.41	0.60	4.06	1.10	0.50	3.57
4	1.51	0.73	5.17	1.45	0.70	4.99	1.39	0.67	4.93	1.08	0.56	4.33
5	1.51	0.73	5.17	1.45	0.70	4.99	1.39	0.67	4.93	1.08	0.56	4.33
6	1.51	0.73	5.17	1.45	0.70	4.99	1.39	0.67	4.93	1.08	0.56	4.33
7	2.25	0.60	4.90	2.17	0.57	4.69	2.07	0.55	4.63	1.58	0.45	3.84
8	1.72	0.57	3.40	1.66	0.54	3.29	1.58	0.52	3.25	1.22	0.43	2.82
9	2.32	0.61	5.20	2.24	0.58	4.97	2.13	0.56	4.90	1.62	0.45	4.05
10	1.50	0.80	6.01	1.45	0.77	5.81	1.39	0.74	5.73	1.08	0.62	5.12
11	1.50	0.79	5.78	1.45	0.75	5.58	1.39	0.72	5.51	1.08	0.60	4.91
12	1.50	0.79	5.78	1.45	0.75	5.58	1.39	0.72	5.51	1.08	0.60	4.91
13	1.52	0.89	7.13	1.46	0.85	6.90	1.40	0.82	6.80	1.08	0.69	6.11
14	1.52	0.89	7.13	1.46	0.85	6.90	1.40	0.82	6.80	1.08	0.69	6.11
15	2.25	0.60	4.90	2.17	0.57	4.69	2.07	0.55	4.63	1.58	0.45	3.84
16	1.58	0.60	3.72	1.52	0.58	3.59	1.45	0.55	3.55	1.13	0.45	3.10
17	1.50	0.79	5.78	1.45	0.75	5.58	1.39	0.72	5.51	1.08	0.60	4.91
18	1.52	0.89	7.13	1.46	0.85	6.90	1.40	0.82	6.80	1.08	0.69	6.11

	Emission factor (g/mile)												
Speed		1999		2000			2001			2002			
(mph)	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	
25	1.85	1.33	10.22	1.73	1.18	9.78	1.60	0.99	7.75	1.55	0.94	7.47	
29	1.84	1.20	8.72	1.72	1.07	8.30	1.59	0.89	6.55	1.54	0.85	6.31	
30	1.84	1.17	8.40	1.72	1.04	7.99	1.59	0.87	6.31	1.54	0.83	6.07	
33	1.84	1.09	7.58	1.72	0.97	7.19	1.59	0.82	5.66	1.54	0.77	5.44	
39	1.88	0.97	6.37	1.75	0.87	6.00	1.62	0.73	4.70	1.57	0.69	4.50	
44	1.93	0.90	5.98	1.80	0.80	5.30	1.66	0.67	4.13	1.62	0.64	3.94	
45	1.94	0.89	5.57	1.82	0.79	5.18	1.68	0.66	4.04	1.63	0.63	3.85	
50	2.10	0.85	5.29	1.97	0.75	4.89	1.81	0.63	3.80	1.76	0.60	3.61	
60	2.77	0.92	8.12	2.59	0.82	7.37	2.39	0.68	5.62	2.31	0.64	5.29	
61	2.86	0.94	8.68	2.67	0.83	7.86	2.46	0.69	5.99	2.38	0.65	5.62	

## MOBILE5b Output by Speed

	Emission factor (g/mile)												
Speed		2003		2004			2005			2020			
(mph)	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	NOx	VOC	CO	
25	1.52	0.89	7.13	1.46	0.85	6.90	1.40	0.82	6.80	1.08	0.69	6.11	
29	1.50	0.80	6.01	1.45	0.77	5.81	1.39	0.74	5.73	1.08	0.62	5.12	
30	1.50	0.79	5.78	1.45	0.75	5.58	1.39	0.72	5.51	1.08	0.60	4.91	
33	1.51	0.73	5.17	1.45	0.70	4.99	1.39	0.67	4.93	1.08	0.56	4.33	
39	1.53	0.65	4.26	1.48	0.62	4.11	1.41	0.60	4.06	1.10	0.50	3.57	
44	1.58	0.60	3.72	1.52	0.58	3.59	1.45	0.55	3.55	1.13	0.45	3.10	
45	1.59	0.60	3.63	1.53	0.57	3.51	1.47	0.55	3.47	1.13	0.45	3.02	
50	1.72	0.57	3.40	1.66	0.54	3.29	1.58	0.52	3.25	1.22	0.43	2.82	
60	2.25	0.60	4.90	2.17	0.57	4.69	2.07	0.55	4.63	1.58	0.45	3.84	
61	2.32	0.61	5.20	2.24	0.58	4.97	2.13	0.56	4.90	1.62	0.45	4.05	

## **EXAMPLE MOBILE5b MODEL OUTPUT FOR 2004**



12004 Fort Meade Area EFs; Daily Time Period (July); MDE input file MOBILE5b (14-Sep-96) 0 -M 49 Warning: + 0.999 MYR sum not = 1. (will normalize) -M 49 Warning: + 0.999 MYR sum not = 1. (will normalize) -M 49 Warning: + 0.999 MYR sum not = 1. (will normalize) -M 49 Warning: +0.886 MYR sum not = 1. (will normalize) -M 49 Warning: + 0.999 MYR sum not = 1. (will normalize) -M 49 Warning: 0.999 + MYR sum not = 1. (will normalize) -M 49 Warning: + 1.00 MYR sum not = 1. (will normalize) -M170 Warning: + Exhaust emissions for gasoline fueled vehicles beginning in 1995 have been reduced as a result of Gasoline Detergent Additive Regulations (1994). -M 56 Comment: +A/C correction factor will be calculated. Value of inputted AC usage parameter is ignored. -M154 Warning: + Refueling emissions for LDGV and LDGT after 1998 model year have been reduced as a result of the Onboard Refueling Vapor Recovery Regulations (1994). 0 Emission Factor Modification Profile Base OEquation Reg Veh Pol First MY Last MY DR Altered 1 1 7 3 1990 1990 11.65 0.00 2 7 1997 9.37 0.00 1 3 1991 3 1 7 3 1998 2003 7.49 0.00 4 1 7 3 2004 2050 3.75 0.00 0I/M program #1 selected: I/M program #2 selected: OStart year (Jan 1): 1984 Start year (Jan 1): 1984 Pre-1981 stringency: 40% Pre-1981 stringency: 23% First MYR covered: First MYR covered: 1977 Last MYR covered: Last MYR covered: 2020 Waiver (pre-1981): Waiver (pre-1981): 3.8

Yes

Yes

Yes

Yes

1984

2020

3.8

Waiver (1981+): 3.8 Waiver (1981+): 3.8 Compliance Rate: 96.8 Compliance Rate: 96.8 Inspection type: Inspection type: Test Only Test Only Inspection frequency: Biennial Inspection frequency: Biennial I/M program #1 vehicle types I/M program #2 vehicle types LDGV - Yes LDGV - Yes LDGT1 - Yes LDGT1 - Yes LDGT2 - Yes LDGT2 - Yes HDGV - Yes HDGV - No 1981 & later MYR test type: 1981 & later MYR test type: Idle IM240 test Cutpoints, HC: 220.000 Cutpoints, HC: 0.800 Cutpoints, CO: 1.200 15.000 Cutpoints, CO: Cutpoints, NOx: 999.000 Cutpoints, NOx: 2.000 Low alt, Annl and Bien Insp Freq TECH 1 & 2 I/M cred data Bien Insp Freq & TECH 4+ I/M credit Idle test data Bien Insp Freq & TECH 4+ I/M credit IM240 test data With 100.0% Technician Training and Certification Credit OFunctional Check Program Description: OCheck Start Model Yrs Vehicle Classes Covered Inspection Eff Comp (Jan1) Covered LDGV LDGT1 LDGT2 HDGV Rate Adi Type Frea Press 1997 1977-2020 Yes Yes Yes Yes Test Only 96.0% 1.00 Biennial Purge 1997 1984-2020 Yes Yes Yes No Test Only 96.0% 1.00 Biennial ATP 1989 1977-2020 Yes Yes Yes Yes Test Only Biennial 96.0% 1.00 OAir pump system disablements: No Catalyst removals: Yes Fuel inlet restrictor disablements: Yes Tailpipe lead deposit test: No EGR disablement: No Evaporative system disablements: No PCV system disablements: No Missing gas caps: Yes OReplacement Diesel Sales Fractions Input by User: 0 1980 1981 1983 1984 1987 1988 1989 1982 1985 1986 0.020 0.025 0.026 0.037 0.075 0.054 0.034 LDDV: 0.002 0.099 0.090 0.002 0.010 0.015 0.029 0.045 0.030 0.024 LDDT: 0.001 0.000 0.069 1999 0 1990 1991 1992 1993 1994 1995 1996 1997 1998 0.006 0.007 0.0010.001 0.001 0.003 0.002 0.001 0.001 0.025 LDDV: 0.009 0.007 0.009 0.008 0.008 0.009 0.010 0.006 LDDT: 0.021 0.014 2001 2002 2003 2004 0 2000 LDDV: 0.001 0.002 0.001 0.000 0.000 LDDT: 0.008 0.011 0.010 0.000 0.000

0VOC HC emission factors include evaporative HC emission factors.  $\boldsymbol{0}$ 

OEmission factors are as of July 1st of the indicated calendar year. LEV phase-in begins in 1999 without using (4/8/94) Guidance Memo Credits OLEV phase-in data read from file: nlevotc.d OUser supplied basic exhaust emissions rates, veh registration distributions. OCal. Year: 2004 Region: Low Altitude: 500. Ft. I/M Program: Yes 90.2 / 90.2 / 90.2 F Ambient Temp: Anti-tam. Program: Yes Operating Mode: 25.1 / 18.3 / 25.1 Reformulated Gas: Yes ASTM Class: B OURBAN STB ST EFS Minimum Temp: 72. (F) Maximum Temp: 96. (F) Period 1 RVP: 7.0 Period 2 RVP: 7.0 Period 2 Yr: 1996 Absolute Humidity:117.00 AC (DB / WB): 1.0 (87.7 / 75.3)OVeh. Type: LDGV LDGT1 LDGT2 LDGTHDGV LDDV LDDT HDDV MC All Veh + Veh. Spd.: 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0 VMT Mix: 0.582 0.204 0.090 0.037 0.002 0.002 0.078 0.004 Ext. Load: 0.000 0.000 0.000 Trlr Tow: 0.007 0.009 0.009 ZEV Fract: 0.00% 0.00% OComposite Emission Factors (Gm/Mile) VOC HC: 0.68 0.69 0.87 0.74 1.98 0.59 5.96 0.85 0.68 1.74 Exhst HC: 0.46 0.47 0.62 0.51 1.10 0.59 0.68 1.74 1.89 0.61 Evap. HC: 0.08 0.06 0.07 0.07 0.60 3.45 0.10 Refuel HC: 0.03 0.05 0.07 0.05 0.12 0.04 Runing HC: 0.07 0.07 0.08 0.07 0.13 0.06 Rsting HC: 0.04 0.04 0.03 0.04 0.05 0.62 0.04 Exhst CO: 6.08 6.67 7.89 7.04 14.43 1.30 8.51 18.21 6.90 1.30 Exhst NOX: 0.82 0.75 1.00 0.82 3.86 1.18 1.21 7.59 0.68 1.46

-M170 Warning:

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Exhaust emissions for gasoline fueled vehicles beginning in 1995 have been reduced as a result of Gasoline Detergent Additive Regulations (1994).

-M 56 Comment:

A/C correction factor will be calculated. Value of inputted AC usage parameter is ignored.

-M154 Warning:

Refueling emissions for LDGV and LDGT after 1998 model year have been reduced as a result of the Onboard Refueling Vapor Recovery Regulations (1994). OEmission factors are as of July 1st of the indicated calendar year. LEV phase-in begins in 1999 without using (4/8/94) Guidance Memo Credits OLEV phase-in data read from file: nlevotc.d OUser supplied basic exhaust emissions rates, veh registration distributions. OCal. Year: 2004 Region: Low Altitude: 500. Ft. I/M Program: Yes 90.2 / 90.2 / 90.2 F Ambient Temp: Anti-tam. Program: Yes Operating Mode: 25.1 / 18.3 / 25.1 Reformulated Gas: Yes ASTM Class: B OURBAN STB ST EFS Minimum Temp: 72. (F) Maximum Temp: 96. (F) Period 1 RVP: 7.0 Period 2 RVP: 7.0 Period 2 Yr: 1996 Absolute Humidity:117.00 AC (DB / WB): 1.0 (87.7 / 75.3)OVeh. Type: LDGV LDGT1 LDGT2 LDGT HDGV LDDV LDDT HDDV MC All Veh + Veh. Spd.: 29.0 29.0 29.0 29.0 29.0 29.0 29.0 29.0 VMT Mix: 0.582 0.204 0.090 0.037 0.002 0.002 0.078 0.004 Ext. Load: 0.000 0.000 0.000 Trlr Tow: 0.007 0.009 0.009 ZEV Fract: 0.00% 0.00% OComposite Emission Factors (Gm/Mile) 5.76 VOC HC: 0.61 0.63 1.54 0.77 0.79 0.68 1.76 0.52 0.60 Exhst HC: 0.40 0.41 0.55 0.46 0.89 0.52 0.60 1.54 1.70 0.53 Evap. HC: 0.08 0.07 0.06 0.07 0.60 3.45 0.10 0.04 Refuel HC: 0.03 0.05 0.07 0.05 0.12 0.06 0.06 0.07 0.06 0.11 0.06 Runing HC: Rsting HC: 0.04 0.04 0.03 0.04 0.05 0.62 0.04 Exhst CO: 5.07 5.65 6.71 5.97 12.37 7.29 15.45 5.81 1.11 1.11 Exhst NOX: 0.83 0.75 1.00 0.83 3.99 1.14 1.16 7.30 0.73 1.45 -M170 Warning: + Exhaust emissions for gasoline fueled vehicles beginning in 1995 have been reduced as a result of Gasoline Detergent Additive Regulations (1994). -M 56 Comment: + A/C correction factor will be calculated. Value of inputted AC usage parameter is ignored. -M154 Warning: Refueling emissions for LDGV and LDGT after 1998 +model year have been reduced as a result of the Onboard Refueling Vapor Recovery Regulations (1994). OEmission factors are as of July 1st of the indicated calendar year. LEV phase-in begins in 1999 without using (4/8/94) Guidance Memo Credits

OLEV phase-in data read from file: nlevotc.d OUser supplied basic exhaust emissions rates, veh registration distributions.

OCal. Year: 2004 Region: Low Altitude: 500. Ft. I/M Program: Yes Ambient Temp: 90.2 / 90.2 / 90.2 F Anti-tam. Program: Yes Operating Mode: 25.1 / 18.3 / 25.1 Reformulated Gas: Yes ASTM Class: B OURBAN STB ST EFS Minimum Temp: 72. (F) Maximum Temp: 96. (F) Period 1 RVP: 7.0 Period 2 RVP: 7.0 Period 2 Yr: 1996 Absolute Humidity:117.00 AC (DB / WB): 1.0 (87.7 / 75.3) OVeh. Type: LDGV LDGT1 LDGT2 LDGT HDGV LDDV LDDT HDDV MC All Veh Veh. Spd.: 30.0 30.0 30.0 30.0 30.0 30.0 30.0 30.0 VMT Mix: 0.582 0.204 0.090 0.037 0.002 0.002 0.078 0.004 Ext. Load: 0.000 0.000 0.000 Trlr Tow: 0.007 0.009 0.009 ZEV Fract: 0.00% 0.00% OComposite Emission Factors (Gm/Mile) VOC HC: 0.60 0.66 0.75 0.61 0.77 1.72 0.51 0.59 1.50 5.72 Exhst HC: 0.39 1.65 0.52 0.40 0.54 0.44 0.85 0.51 0.59 1.50 Evap. HC: 0.08 0.07 0.06 0.07 0.60 3.45 0.10 Refuel HC: 0.03 0.12 0.04 0.05 0.07 0.05 Runing HC: 0.06 0.06 0.06 0.06 0.10 0.05 Rsting HC: 0.04 0.04 0.03 0.04 0.05 0.62 0.04 5.75 11.97 Exhst CO: 4.86 5.44 6.46 1.07 1.07 7.04 14.86 5.58 Exhst NOX: 0.83 0.75 1.01 0.83 4.02 1.13 1.15 7.25 0.74 1.45 -M170 Warning: + Exhaust emissions for gasoline fueled vehicles beginning in 1995 have been reduced as a result of Gasoline Detergent Additive Regulations (1994). -M 56 Comment: + A/C correction factor will be calculated. Value of inputted AC usage parameter is ignored. -M154 Warning: + Refueling emissions for LDGV and LDGT after 1998 model year have been reduced as a result of the Onboard Refueling Vapor Recovery Regulations (1994). OEmission factors are as of July 1st of the indicated calendar year. LEV phase-in begins in 1999 without using (4/8/94) Guidance Memo Credits OLEV phase-in data read from file: nlevotc.d

OUser supplied basic exhaust emissions rates, veh registration distributions.

OCal. Year: 2004 An	Region I/M Program nti-tam. Program Reformulated Gas	: Low : Yes A : Yes Ope : Yes	Altitude: mbient Temp: rating Mode: ASTM Class: 1	500. Ft. 90.2 / 25.1 / 3	90.2 / 18.3 /	90.2 F 25.1
OURBAN STB ST EFS						
	Minimum Temp	: 72. (F) M	aximum Temp: 9	96. (F)		
	Period 1 RVP	: 7.0 P	eriod 2 RVP:	7.0 Peri	iod 2 Yr	: 1996
	bsolute Humidity	:117.00 A	C (DB / WB):	1.0 (	87.7 /	75.3)
OVeh. Type: LDGV	LDGT1 LDGT2	LDGT HDGV	LDDV LDDT	HDDV	MC A	ll Veh
Veh Snd $\cdot$ 33 0	- 33 0 33 0		22 0 22 0		22 0	
VMT Mix. 0.58	2 0 204 0 090	55.0		2 0 070	33.0	
Ext. Load: 0.00		0.037	0.002 0.00	2 0.078	0.004	
Trlr Tow: 0.00	7 0.009 0.009					
ZEV Fract: 0.00	\$ 0.00%					
OComposite Emissi	on Factors (Gm/M	ile)				
VOC HC: 0.56		0.62 1.60	0.47 0.54	1.38	5.60	0.70
Exhst HC: 0.36	0.37 0.50	0.41 0.74	0.47 0.54	1.38	1.54	0.47
Evap. HC: 0.08	0.07 0.06	0.07 0.60	0.01	1.00	3.45	0.10
Refuel HC: 0.03	0.05 0.07	0.05 0.12	2 March 1997		0.10	0.04
Runing HC: 0.05	0.05 0.06	0.05 0.09	ł			0.05
Rsting HC: 0.04	0.04 0.03	0.04 0.05			0.62	0.04
Exhst CO: 4.30	4.88 5.81	5.17 10.98	0.98 0.98	6.42	13.28	4.99
Exhst NOX: 0.84	0.75 1.01	0.83 4.12	1.12 1.14	7.18	0.77	1.45
-M170 Warning:				,		
+ Ex	haust emissions	for gasoline	fueled vehicl	es		
be	ginning in 1995	have been red	uced as a res	ult of		
Ga	soline Detergent	Additive Reg	ulations (199	4).		
-M 56 Comment:						
+ A	/C correction fa	ctor will be	calculated.			
Va	lue of inputted	AC usage para	meter is igno	red.		
-M154 Warning:						
+ Re	fueling emission	s for LDGV an	d LDGT after	1998		
mo	del year have be	en reduced as	a result of	the		
On	board Refueling	Vapor Recover	y Regulations	(1994).		
0Emission factors	are as of July	1st of the in	dicated calen	dar year	•	
LEV phase-in beg	ins in 1999 with	out using (4/	8/94) Guidanc	e Memo C	redits	
OLEV phase-in dat	a read from file	: nlevotc.d				
UUser supplied b	asic exhaust emi	ssions rates,	veh registra	tion dis	tributic	ons.
OCal Vears 2004	Decion	LOW	Altitude.	500 F+		,
Jular. 1841. 2004	Region		ATCTCUGE:	JUU. FL	•	

I/M Program: Yes Ambient Temp: 90.2 / 90.	2 / 90.2 F
Anti-tam. Program: Yes Operating Mode: 25.1 / 18.	3 / 25.1
Reformulated Gas: Yes ASTM Class: B	
UURBAN STB ST EFS	
Minimum Temp: 72. (F) Maximum Temp: 96. (F)	0.11. 1000
$\frac{1}{2} \frac{1}{2} \frac{1}$	2 Yr: 1996
OVeh. Type: LDGV LDGT1 LDGT2 LDGT HDGV LDDV LDDT HDDV MC	1 / 75.3) All Veh
+	ATT VEI
Veh. Spd.: 39.0 39.0 39.0 39.0 39.0 39.0 39.0 39.0	0
VMT Mix: 0.582 0.204 0.090 0.037 0.002 0.002 0.078 0.	004
Ext. Load: 0.000 0.000 0.000	
Trlr Tow: 0.007 0.009 0.009	
ZEV Fract: 0.00% 0.00%	
OComposite Emission Factors (Gm/Mile)	10 0 00
VOC HC: $0.49$ $0.52$ $0.65$ $0.56$ $1.43$ $0.41$ $0.47$ $1.20$ 5.	43 0.62
EXAMPLE HC: $0.31$ $0.33$ $0.44$ $0.36$ $0.59$ $0.41$ $0.47$ $1.20$ $1.$	36 0.41
Evap. HC: 0.08 0.07 0.06 0.07 0.60 3.	45 0.10
Refuel HC: 0.03 0.05 0.07 0.05 0.12	0.04
Runing HC: $0.04$ $0.04$ $0.04$ $0.04$ $0.04$ $0.08$	0.04
Rsting HC: $0.04$ $0.04$ $0.03$ $0.04$ $0.05$ $0.04$	62 0.04
Exhibit CO: $3.44$ $4.02$ $4.81$ $4.26$ $9.81$ $0.85$ $0.85$ $5.61$ 10.	94 4.11
EXAST NOX: 0.85 0.75 1.01 0.83 4.31 1.14 1.16 7.32 0.	81 1.48
-M170 Warning:	
+ Exhaust emissions for gasoline fueled vehicles	
beginning in 1995 have been reduced as a result of	
Gasoline Detergent Additive Regulations (1994).	
-M 56 Comment:	
+ A/C correction factor will be calculated.	
Value of inputted AC usage parameter is ignored.	
-M154 Warning:	
+ Refueling emissions for LDGV and LDGT after 1998	
model year have been reduced as a result of the	
Onboard Refueling Vapor Recovery Regulations (1994).	
OEmission factors are as of July 1st of the indicated calendar year.	
LEV phase-in begins in 1999 without using (4/8/94) Guidance Memo Credi	ts
OLEV phase-in data read from file: nlevotc.d	
OUser supplied basic exhaust emissions rates, veh registration distrib	outions.
UCAL. YEAR: 2004 REGION: LOW ALTITUDE: 500. FT.	2 / 90 2 F
I/M Program: ies Ambient Temp: 90.2 / 90.	2 / 90.2 r 3 / 95 1
Anti-tam. Program: ies Operating Mode: 25.1 / 10.	J / 2J.I

	Refo	rmula	ted Gas	: Yes		ASTM Cl	lass: B			
OURBAN STB ST	EFS									
		Minin	um Temp	: 72.	(F) Ma	ximum 7	Cemp: 96	5. (F)		
		Peric	d 1 RVP	: 7.0	Pe	eriod 2	RVP: 7	.0 Peri	od 2 Y:	r: 1996
	Absol	ute H	lumidity	:117.00	) AC	C (DB /	WB):	1.0 (	87.7 /	75.3)
OVeh. Type: ]	LDGV LI	)GT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC A	All Veh
+						-				
Veh. Spd.: 44	4.0 44	1.0	44.0		44.0	44.0	44.0	44.0	44.0	
VMT Mix: (	0.582 0	.204	0.090		0.037	0.002	0.002	0.078	0.004	
Ext. Load: (	0.000 0	.000	0.000							
Trlr Tow: (	0.007 0	0.009	0.009							
ZEV Fract: (	).00% (	).00%					· · ·			
OComposite Em	ission H	actor	s (Gm/M	ile)						
VOC HC:	0.45 0	).48	0.60	0.52	1.34	0.37	0.43	1.09	5.35	0.58
Exhst HC:	0.27 0	).30	0.40	0.33	0.52	0.37	0.43	1.09	1.28	0.37
Evap. HC:	0.08 0	.07	0.06	0.07	0.60				3.45	0.10
Refuel HC:	0.03 0	0.05	0.07	0.05	0.12					0.04
Runing HC:	0.03 0	0.03	0.03	0.03	0.06					0.03
Rsting HC:	0.04 (	0.04	0.03	0.04	0.05				0.62	0.04
Exhst CO:	2.91 3	3.48	4.19	3.70	9.48	0.80	0.80	5.27	9.74	3.59
Exhst NOX:	0.85 (	).76	1.01	0.83	4.48	1.20	1.23	7.73	0.83	1.52
-M170 Warning	:				· · · · · · · · · · · · · · · · · · ·					
+	Exhaus	st emi	ssions	for gas	soline	fueled v	vehicles	5		
	beginn	ning i	n 1995	have b	een redu	iced as	a resu	Lt of		
	Gasoli	ine De	etergent	Addit	ive Regu	lation	s (1994)			
-M 56 Comment	:		<b>,</b>							
+	A/C d	correc	ction fa	ctor w	ill be d	calculat	ted.			
	Value	of in	nputted	AC usa	de para	neter i	s ignore	ed.		
-M154 Warning	:		- <u>r</u>		<b>J I </b>					
+	Refuel	ling e	emission	s for 3	LDGV and	d LDGT	after 19	998		
	model	vear	have be	en red	uced as	a resu	lt of the	ne		
	Onboa	rd Re:	fueling	Vapor	Recover	v Regula	ations	(1994).		
OEmission fac	tors are	e as (	of July	1st of	the ind	dicated	calend	ar vear	•	
LEV phase-in	begins	in 19	999 with	out us	ing (4/	8/94) G	uidance	Memo C	redits	
OLEV phase-in	data re	ad f	rom file	: nlev	otc.d	.,,				
OUser supplie	d basi	c exh	aust emi	ssions	rates.	veh re	gistrat	ion dis	tributi	ons.
CODOL Duppile	a babi	e chin		0010110	140007	Ven 10	grberde.			
OCal. Year: 2	004		Region	• 1.0₩		Alti	tude:	500. Ft		
Jours rours 2		т/м	Program	· Yes	Δι	whient '	Temp:	90.2 /	90.2 /	90.2 F
	Anti	-tam	Program	· Yes	One	rating	Mode:	25.1 /	18.3 /	25.1
	Ref	ormula	ated Gas	: Yes	ope	ASTM C	lass: B	/	/	
OURBAN STB ST	EFS									•

Minimum Temp: 72. (F) Maximum Temp: 96. (F) Period 1 RVP: 7.0 Period 2 RVP: 7.0 Period 2 Vr: 1996										
	Ab	solute 1	Humidity	:117.0	0 A	C (DB /	WB):	1.0 (	87.7 /	75.31
0Veh. Type: +	LDGV	LDGT1	LDGT2	LDGT	HDGV	LDDV	LDDT	HDDV	MC 2	All Veh
Veh. Spd.:	45.0	45.0	45.0		45.0	45.0	45 0	45 0	45 0	
VMT Mix:	0.582	0.204	0.090		0.037	0.002	0 002	0 078	0 004	
Ext. Load:	0.000	0.000	0.000			0.002	0.002	0.070	0.001	
Trlr Tow:	0.007	0.009	0.009							
ZEV Fract:	0.00%	0.00%								
0Composite	Emissio	n Facto	rs (Gm/M	ile)						
VOC HC:	0.45	0.48	0.59	0.51	1.33	0.36	0.42	1.08	5.33	0.57
Exhst HC:	0.27	0.30	0.39	0.33	0.50	0.36	0.42	1.08	1.27	0.36
Evap. HC:	0.08	0.07	0.06	0.07	0.60				3.45	0.10
Refuel HC:	0.03	0.05	0.07	0.05	0.12					0.04
Runing HC:	0.03	0.03	0.03	0.03	0.06					0.03
Rsting HC:	0.04	0.04	0.03	0.04	0.05				0.62	0.04
Exhst CO:	2.82	3.39	4.08	3.60	9.48	0.80	0.80	5.24	9.57	3.51
Exhst NOX:	0.85	0.76	1.01	0.83	4.51	1.22	1.25	7.85	0.84	1.53
-M170 Warning: + Exhaust emissions for gasoline fueled vehicles beginning in 1995 have been reduced as a result of										
-M 56 Comme	nt:		<b>,</b>		<b>j</b>					
+	A/	C corre	ction fa	ctor w	ill be	calculat	ted.			
	Val	ue of i	nputted	AC usa	qe para	meter i	s ignor	ed.		
-M154 Warni	ng:		-							
+	Ref	ueling	emission	s for	LDGV and	d LDGT a	after 1	998		
	mod	el year	have be	en red	uced as	a resu	lt of t	he		
	Onb	oard Re	fueling	Vapor	Recover	y Regula	ations	(1994).		
0Emission f	actors	are as	of July	1st of	the in	dicated	calend	ar year	•	
LEV phase-	in begi	ns in 1	999 with	out us	ing (4/	8/94) G	uidance	Memo C	redits	
OLEV phase-	in data	read f	rom file	: nlev	otc.d					
OUser suppl	ied ba	sic exh	aust emi	ssions	rates,	veh re	gistrat	ion dis	tributi	ons.
			•							
OCal. Year:	2004		Region	Low		Alti	tude:	500. Ft	• • •	
		I/M	Program	1: Yes	A	mbient '	Temp:	90.2 /	90.2 /	90.2 F
	An	ti-tam.	Program	n: Yes	Ope	rating 1	Mode:	25.1 /	18.3 /	25.1
	R	eformul	ated Gas	: Yes		ASTM C	lass: B			
OURBAN STB	ST EFS							<b>•</b> ·		
		Mini	mum Temp	; 72.	(F) M	aximum	Temp: 9	6. (F)		1000
		Peri	od 1 RVE	': 7.0	I P	eriod 2	RVP:	1.0 Per	100 Z Y	r: 1996

\_\_\_\_\_

	Ab	solute 1	Humidity	:117.0	0 A0	C (DB /	WB):	1.0 (	87.7 /	75.3)
OVeh. Type:	LDGV	LDGT1	LDGT2	LDGT	HDGV		דתתו	нору	MC. Z	ll Veh
+ 11							2001	11001		
Veh. Spd.:	50.0	50.0	50.0		50.0	50.0	50.0	50.0	50.0	
VMT Mix:	0.582	0.204	0.090		0.037	0.002	0.002	0.078	0.004	
Ext. Load:	0.000	0.000	0.000							
Trlr Tow:	0.007	0.009	0.009							
ZEV Fract:	0.00%	0.00%	0.000							
OComposite 1	Emissio	n Facto	rs (Gm∕N	(ile)					· · ·	2
VOC HC:	0.42	0.45	0.57	0.49	1.27	0.34	0.40	1.01	5.31	0.54
Exhst HC:	0.25	0.28	0.38	0.31	0.46	0.34	0.40	1.01	1.24	0.34
Evap. HC:	0.08	0.07	0.06	0.07	0.60	0101	0.10	1.01	3.45	0 10
Refuel HC:	0.03	0.05	0.07	0.05	0 12				0110	0 04
Runing HC:	0.02	0 02	0.02	0.02	0.05					0.02
Rating HC:	0.02	0.02	0.02	0.02	0.05				0 62	0.02
Exhst CO:	2 56	3 14	3 78	2 22	9 80	0 79	0 79	5 20	9 12	3 29
Exhst NOX:	0 91	0.82	1 10	0 91	4 67	1 35	1 27	8 65	0 93	1 66
DAIISC NOA.	0.51	0.02	1.10	0.51	4.07	1.00	1.57	0.05	0.55	1.00
-M170 Warni	na.			2				·····		
+	ny. Fvh	aust om	issions	for as	soline	fueled	vehicle	e		
1	bea	aust em inning	13310113	have h	sorred	uced as	> regu	3 1+ of		
	Cae	oline D	etergent	- Addit	ive Per	uletion	a 1094	IC OL		
-M 56 Comme	oas nt•	orrife D	ecergent	- nuuru	.rve neg	uracron	5 (1))4	, •		
4	пс. л/	C corre	ction fa	actor w	rill be	calcula	ted			
•		v = of i	nnutted		ae nara	motor i	s ignor	ed		
-M154 Warni	ng.	ue or i	inputted	ne usu	ige para		b rgnor	cu.		
TILOA WALIIL	ny. Dof	uoling	omissio	e for	LDGV an	d LDCT	after 1	998		
•	mod	al vor	have by	aen rec	luced as	a resu	1+ of t	he		
	Onh	er year oard Do	fueling	Vapor	Recover	v Pecul	ations	(1994)		
OFmission f	actors	oaro se	of July	let of	the in	y negui dicated	calend	ar vear		
LEV phase-	in bogi	are as	aga witi	Lac of	$\frac{1}{1}$ $\frac{1}{1}$	8/94)	uidance	Memo C	redits	
OLEV phase-	in data	ns in i	from file	av nlet	otc d	0/54/ 0	uruance	Tiendo o	104100	
Olleer suppl	in uata	aig orb		e. Hiev	rates	voh re	aistrat	ion dis	tributi	ons.
ouser suppr	red pa	STC EXI	laust ent	19910113	s laces,	ven re	gratiat	TOU GID	CLIDUCI	0110.
OCal Voary	2004		Pagio			∆1+ <del>i</del>	tude	500 Ft		
UCal. leaf:	2004	т /»	Regio	II: LOW	~ ~	mhiont		an 2 /		90 2 F
	7	1/M	l Program	M: IES			Mede:	25 1 /	183/	25 1
	An	ti-tam.	Program	m: ies	Ope	acting	Mode:	23.17	10.5 /	20.1
		eiormui	ated Ga	s: ies		ASTM C	Jass: c	)		
UURBAN STB	ST EFS	201		. 70	(17)	( i		د ۱۹۹۱ - ۲۹۱		
		Mini	mum Tem	p: 72.	("") 🕅	aximum	remp: 3	7 0 P~~	tind 2 V	r. 1996
	- 1	Peri	.oci i RV	F: /.(	ע ד ער אינ	c (DR /	KVP:	1 0 /	977/	75 31
	Ab	solute	HUMIAIT	A:TT\.(		יוממז א	WD):	דימטה ( זעטנה	MC	311 Vah
oven. Type:	ГЛСА	LDG1.T	LDG12	PDG.L	HDGV	עתתיד	עתתיד	עעעח	PIC .	ATT AGU

+											
Veh. Sp	d.:	60.0	60.0	60.0		60.0	60.0	60.0	60.0	60.0	
VMT N	lix:	0.582	0.204	0.090		0.037	0.002	0.002	0.078	0.004	
Ext. Lo	ad:	0.000	0.000	0.000							
Trlr 7	low:	0.007	0.009	0.009							
ZEV Fra	act:	0.00%	0.00%								
OComposi	ite B	Imission	Factor	s (Gm/N	(ile)						
VOC	HC:	0.47	0.49	0.62	0.53	1.23	0.32	0.37	0.94	5.76	0.57
Exhst	HC:	0.30	0.32	0.44	0.36	0.43	0.32	0.37	0.94	1.69	0.38
Evap.	HC:	0.08	0.07	0.06	0.07	0.60				3.45	0.10
Refuel	HC:	0.03	0.05	0.07	0.05	0.12					0.04
Runing	HC:	0.02	0.01	0.02	0.01	0.04					0.01
Rsting	HC:	0.04	0.04	0.03	0.04	0.05				0.62	0.04
Exhst	co:	3.87	4.54	5.57	4.85	12.33	0.89	0.89	5.86	20.14	4.69
Exhst N	NOX:	1.18	1.14	1.53	1.26	5:00	1.82	1.86	11.69	1.32	2.17

-M170 Warning:

+

+

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Exhaust emissions for gasoline fueled vehicles beginning in 1995 have been reduced as a result of Gasoline Detergent Additive Regulations (1994).

-M 56 Comment:

A/C correction factor will be calculated. Value of inputted AC usage parameter is ignored.

-M154 Warning:

Refueling emissions for LDGV and LDGT after 1998 model year have been reduced as a result of the Onboard Refueling Vapor Recovery Regulations (1994).

OEmission factors are as of July 1st of the indicated calendar year. LEV phase-in begins in 1999 without using (4/8/94) Guidance Memo Credits OLEV phase-in data read from file: nlevotc.d

OUser supplied basic exhaust emissions rates, veh registration distributions.

0Cal. Year: 2004	Region: I/M Program:	Low Yes	Altitu Ambient Te	de: 500.Ft mp: 90.2/	2. / 90.2 / 90.2 F
Ant	ti-tam. Program:	Yes C	perating Mo	de: 25.1 /	/ 18.3 / 25.1
R	eformulated Gas:	Yes	ASTM Cla	ss: B	
OURBAN STB ST EFS					
	Minimum Temp:	72. (F)	Maximum Te	mp: 96. (F)	
	Period 1 RVP:	7.0	Period 2 R	VP: 7.0 Pe	riod 2 Yr: 1996
Ab	solute Humidity:	117.00	AC (DB / W	/B): 1.0	( 87.7 / 75.3)
0Veh. Type: LDGV	LDGT1 LDGT2	LDGT HDG	V LDDV	LDDT HDDV	MC All Veh
+					
Veh. Spd.: 61.0	61.0 61.0	61.0	61.0 6	51.0 61.0	61.0

VMT Mix:	0.582	0.204	0.090		0.037	0.002	0.002	0.078	0.004	
Ext. Load:	0.000	0.000	0.000							
Trlr Tow:	0.007	0.009	0.009							
ZEV Fract:	0.00%	0.00%								
OComposite E	mission	Factors	s (Gm/M	ile)						
VOC HC:	0.48	0.50	0.63	0.54	1.23	0.32	0.37	0.94	5.85	0.58
Exhst HC:	0.31	0.33	0.45	0.37	0.44	0.32	0.37	0.94	1.78	0.39
Evap. HC:	0.08	0.07	0.06	0.07	0.60				3.45	0.10
Refuel HC:	0.03	0.05	0.07	0.05	0.12					0.04
Runing HC:	0.01	0.01	0.02	0.01	0.03					0.01
Rsting HC:	0.04	0.04	0.03	0.04	0.05				0.62	0.04
Exhst CO:	4.14	4.81	5.92	5.16	12.77	0.91	0.91	6.00	22.35	4.97
Exhst NOX:	1.21	1.17	1.58	1.30	5.03	1.89	1.93	12.14	1.36	2.24

# APPENDIX G TRAFFIC MODELING



### **NO-ACTION**

### **EXHIBITS 1-6**










G-8





## **PROPOSED ACTION**

## **EXHIBITS 7-12**









G-15







## ALTERNATIVE A

EXHIBITS 13-15

-520

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# **APPENDIX H**

# SOCIOECONOMIC ANALYSIS AND DATA EIFS MODELING

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### **EIFS MODELING**

The socioeconomic and demographic impacts of the nine projects, both individually and cumulatively, were determined using the U.S. Army Corps of Engineers Economic Impact Forecast System (EIFS) model. The EIFS model was developed by the Corps of Engineers Construction Engineering Research Laboratory (CERL) to provide Department of the Army (DA) analysts with access to current economic data and to provide a defensible, easy to use model capable of assessing the socioeconomic impacts of DA actions at military installations. The EIFS model is designed to estimate the impacts of actions such as changes in mission, construction, and training, including changes mandated under Base Realignment and Closure (BRAC).

The EIFS has four types of models: (1) Forecast Models; (2) Automated input-Output Multiplier Systems (AIMS); (3) the Rational Threshold Value (RTV) and; (4) Forecast of Significance of Impacts. The Forecast Models are used for estimating the total (i.e., direct, indirect, and induced) socioeconomic impacts of DA actions. The Forecast Models use as inputs the two types of primary, direct socioeconomic impacts that occur during construction and operation: (1) changes in population owing to the transfer of military personnel and civilian employees, and (2) changes in annual purchases of goods and services during the construction and operation phases of new projects. The EIFS Forecast Model contains five different submodels, each designed to assess a different type of activity: (1) Standard EIFS Forecast Model is used for operation impacts; (2) construction model; (3) construction of on-base housing; (4) training, and (5) AR 5-20 Economic Effects Analysis. Economic base multipliers are used to regionalize the economic base multipliers so that they reflect the size and economic composition of the region of influence (ROI).

The EIFS model uses the RTV approach to estimate the significance of the total changes in four economic indicator variables (i.e., sales volume, employment, personal income, and population). The RTV first compiles historic time series data for each of these four variables within the ROI to identify the average annual percent change, and the maximum positive and negative yearly changes. Both absolute and percent yearly fluctuations are calculated for each of these four

variables to generate a baseline of the degree of historic fluctuation in the ROI's economy. EIFS forecasts the percent changes in each of the four indicator variables that would be caused by the Proposed Action; if the forecast change exceeds the RTV threshold then the action would have a significant economic impact.

### Socioeconomic Impacts Ft. Meade EIS Impacts During Construction

	Project #1: Mil Processin	itary Entrance g Station	Р	roject #2: Pers Replaceme	onnel Barracks, nt Phase I	Р	Project #3: Pers Replaceme	onnel Barracks, nt Phase II	Project #4: D	ning Facility
Characteristics & Assumptions	Value	% Impact		Value	% Impact		Value	% Impact	Value	% Impact
Dollar volume of construction	\$ 4,100,000		\$	20,600,000		\$	20,600,000		\$ 6,300,000	
Local exependitures	\$ 2,314,666		\$	11,629,783		\$	11,629,783		\$ 3,556,681	
Percent for labor	34.2%			34.2%			34.2%		34.2%	
Percent for materials	57.8%			57.8%			57.8%		57.8%	
Percent for other	8.0%			8.0%			8.0%		8.0%	
% construction workers migrating	0.0%			0.0%			0.0%		0.0%	
Export Income Multiplier	2.2965			2.2965			2.2965		2.2965	
Impacts										
Change in sales volume - Direct	\$ 1,974,740		\$	9,921,866		\$	9,921,866		\$ 3,034,357	
Change in sales volume - induced	\$ 2,560,251		\$	12,863,700		\$	12,863,700		\$ 3,934,044	
Total	\$ 4,534,991	0.019%	\$	22,785,566	0.095%	\$	22,785,566	0.095%	\$ 6,968,401	0.029%
Employment - Direct	10			52		:	52		16	
Employment - Total	48	0.015%		242	0.076%		242	0.076%	74	0.023%
Income - Direct	\$ 256,597		\$	1,289,245		\$	1,289,245		\$ 394,284	
Total Income - (place of work)	\$ 1,443,690		\$	7,253,662		\$	7,253,662		\$ 2,218,353	
Total Income - (place of residence)	\$ 1,443,690	0.009%	\$	7,253,662	0.044%	\$	7,253,662	0.044%	\$ 2,218,353	0.013%
Local Population	0	0.000%		0	0.000%		0	0.000%	0	0.000%
Local off-base population	0			0			0		0	
Number of School Children	0			0			0		0	
Demand for Housing - Rental	0			0			0		0	
Demand for Housing - Owner Occupied	0			0			0		0	
Government Expenditures	\$ 64,354		\$	323,338		\$	323,338		\$ 98,885	
Government Revenues	\$ 83,064		\$	417,347		\$	417,347		\$ 127,635	
Net Government Revenues	\$ 18,711		\$	94,010		\$	94,010		\$ 28,751	
Civilian Employees Expected to relocate	0			0			0		0	
Military Employees Expected to relocate	· 0			0			0		0	

### Socioeconomic Impacts Ft. Meade EIS Impacts During Construction

	Project #5: Comp	any Headquarters	Pr	oject #6: Batta	lion Operations	Project #7: B	old Venture I		Project #8: Bo	ld Venture II
Characteristics & Assumptions	Value	% Impact		Value	% Impact	Value	% Impact		Value	% Impact
Dollar volume of construction	\$ 1,400,000		\$	1,500,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$ 4,600,000		\$	16,500,000	
Local exependitures	\$ 790,374		\$	846,829		\$ 2,596,942	· · · · · · · · · · · · · · · · · · ·	\$	9,315,118	
Percent for labor	34.2%			34.2%		34.2%			34.2%	
Percent for materials	57.8%			57.8%		57.8%			57.8%	
Percent for other	8.0%	1. N.		8.0%		8.0%			8.0%	
% construction workers migrating	0.0%			0.0%		0.0%	1		0.0%	
Export Income Multiplier	2.2965			2.2965		2.2965			2.2965	
Impacts										L .
Change in sales volume - Direct	\$ 674,302		\$	722,466		\$ 2,215,562		\$	7,947,126	
Change in sales volume - induced	\$ 874,232		\$	936,677		\$ 2,872,477		\$	10,303,449	
Total	\$ 1,548,534	0.006%	\$	1,659,143	0.007%	\$ 5,088,039	0.021%	\$	18,250,575	0.076%
Employment - Direct	4			4		12	· ·		42	
Employment - Total	16	0.005%		18	0.005%	54	0.017%		194	0.060%
Income - Direct	\$ 87,619		\$	93,877	1	\$ 287,890		\$	1,032,647	
Total Income - (place of work)	\$ 492,967		\$	528,179		\$ 1,619,750		\$	5,809,972	
Total Income - (place of residence)	\$ 492,967	0.003%	\$	528,179	0.003%	\$ 1,619,750	0.010%	\$	5,809,972	0.035%
Local Population	0	0.000%		0	0.000%	0	0.000%		0	0.000%
Local off-base population	. 0			0		0			0	
Number of School Children	0			· 0		0			0	
Demand for Housing - Rental	0			0		0			0	
Demand for Housing - Owner Occupied	0			0		0			. 0	
Government Expenditures	\$ 21,974		\$	23,544		\$ 72,202		\$	258,984	
Government Revenues	\$ 28,363		\$	30,389		\$ 93,194		\$	334,283	
Net Government Revenues	\$ 6,389		\$	6,845		\$ 20,992		\$	75,299	
Civilian Employees Expected to relocate	0			0		0		÷	0	
Military Employees Expected to relocate	. 0			0		0	:		0	

### Socioeconomic Impacts Ft. Meade EIS Impacts During Construction

				· .			Pr	oject #11: US	A 1st Recruiting		,
		Project #9: Bo	ld Venture III	 Project #10: Bo	dd Venture	IV	Brig	ade, Army Me	dical DetachmentI		Totals
Characteristics & Assumptions		Value	% Impact	Value	%	Impact		Value	% Impact		
Dollar volume of construction	\$	4,600,000		\$ 1,400,000			\$	6,200,000		\$	87,800,000
Local exependitures	\$	2,596,942		\$ 790,374			\$	3,500,226		\$	49,567,717
Percent for labor	1	34.2%		34.2%				34.2%			
Percent for materials	Ľ	57.8%		57.8%				57.8%			
Percent for other		8.0%		8.0%				8.0%			
% construction workers migrating		0.0%		0.0%				0.0%			
Export Income Multiplier		2.2965		2.2965				2.2965			
Impacts											
Change in sales volume - Direct	\$	2,215,562		\$ 674,302			\$	2,986,193			
Change in sales volume - induced	\$	2,872,477		\$ 874,232			\$	3,871,599			
Total	\$	5,088,039	0.021%	\$ 1,548,534	0	.006%	\$	6,857,792	0.028%		
Employment - Direct		12		4				16			
Employment - Total		54	0.017%	16	0	.005%		73	0.023%		
Income - Direct	\$	287,890		\$ 87,619			\$	388,025			
Total Income - (place of work)	\$	1,619,750		\$ 492,967			\$	2,183,141		ŀ	
Total Income - (place of residence)	\$	1,619,750	0.010%	\$ 492,967	0	0.003%	\$	2,183,141	0.013%	ľ	
Local Population	1	0	0.000%	0	0	.000%		0	0.000%		
Local off-base population		0		- 0				0			
Number of School Children		0		0				0			
Demand for Housing - Rental	[	0		0				0			
Demand for Housing - Owner Occupied		0		0				0	11.1		
Government Expenditures	\$	72,202		\$ 21,974			\$	97,315			
Government Revenues	\$	93,194		\$ 28,363			\$	125,609			
Net Government Revenues	\$	20,992		\$ 6,389			\$	28,294			
Civilian Employees Expected to relocate		0		0	•			0			
Military Employees Expected to relocate		0		0				0		L	

# Socioeconomic Impacts Ft. Meade EIS Impacts During Operation

							Project #3:	Personnel				
	Pı	oject #1: Mil	itary Entrance		Project #2:	Personnel	Bar	racks, Repla	cement Phase			
		Processin	g Station	Bar	racks, Repla	acement Phase I		II		Pr	oject #4: Di	ning Facility
Characteristics & Assumptions		Value	% Impact		Value	% Impact		Value	% Impact		Value	% Impact
Change in local expenditures	s \$	1,673,052		\$	-		\$	-		\$	-	
Local expenditures		944,526			-						-	
Change in Civilian employment	t	50	. /		-			-			-	
Average income of civilian personne	1 \$	46,309		\$	46,309		\$	46,309		\$	46,309	
% Expected to relocate	e	25%	· .									
Change in military employment	t											
Export Income Multiplier	r	2.2965			2.2965			2.2965			2.2965	
Impacts												
Change in sales volume - Direct	t	2,670,840			-			-			-	
Change in sales volume - induced	1\$	3,462,745	-	\$	· •		\$	-		\$	-	
Tota	1 \$	6,133,585	0.025%	\$	-	0.000%	\$		0.000%	\$	1 2	0.000%
Employment - Direct	t	14			-			-			-	
Employment - Total		83	0.026%		- 1	0.000%		-	0.000%		-	0.000%
Income - Direct	t	347,602	· · · ·		-			-				
Total Income - (place of work)		3,113,165			-			-			-	[
Total Income - (place of residence)	)\$	3,113,165	0.019%	\$	-	0.000%	\$	-	0.000%	\$	-	0.000%
Local Population	1	34	0.006%		-	0.000%		-	0.000%		-	0.000%
Local off-base population	1	34			-						-	
Number of School Children	1	5			-			· -			-	
Demand for Housing - Renta	1	3			-			-			-	
Demand for Housing - Owner Occupied	1	9.075342466			0			0			0	
Government Expenditures	s\$	153,686		\$	-		\$	-		\$	-	
Government Revenues	s	195,647			-			-			-	
Net Government Revenues	s	41,961			-			-			-	
Civilian Employees Expected to relocate	e	13			0			0			0	
Military Employees Expected to relocate	e	0	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		0			0			0	

## Socioeconomic Impacts Ft. Meade EIS Impacts During Operation

	1	Project #5: Company			Project #6	: Battalion	-				
		Headq	uarters		Opera	ations		Project #7: B	old Venture I	Project #8: Bo	old Venture II
Characteristics & Assumptions		Value	% Impact		Value	% Impact		Value	% Impact	Value	% Impact
Change in local expenditures	\$	-		\$	-		\$	7,026,817		\$ 12,715,192	
Local expenditures					-		1	3,967,007.40		7,178,394.34	
Change in Civilian employment		-			-			210		380	
Average income of civilian personnel	\$	46,309		\$	46,309		\$	46,309		\$ 46,309	
% Expected to relocate								25%		25%	
Change in military employment											
Export Income Multiplier		2.2965			2.2965			2.2965		2.2965	
Impacts											
Change in sales volume - Direct		-			-			11,217,530		20,298,387	
Change in sales volume - induced	\$	-		\$	-		\$	14,543,527	+	\$ 26,316,859	
Total	\$	-	0.000%	\$	-	0.000%	\$	25,761,057	0.107%	\$ 46,615,246	0.194%
Employment - Direct		-						60		109	
Employment - Total		-	0.000%		-	0.000%		348	0.108%	629	0.196%
Income - Direct		-						1,459,928		2,641,775	
Total Income - (place of work)		-			-			13,075,293		23,660,054	
Total Income - (place of residence)	\$	-	0.000%	\$	- 1	0.000%	\$	13,075,293	0.079%	\$ 23,660,054	0.143%
Local Population		-	0.000%		-	0.000%		141	0.024%	255	0.044%
Local off-base population	1.1	-	and the second		-			141		255	
Number of School Children		-			-			20		37	
Demand for Housing - Rental		-			-			14		26	
Demand for Housing - Owner Occupied		0			0			38.11643836		68.97260274	
Government Expenditures	\$	-		\$	-		\$	645,479		\$ 1,168,010	
Government Revenues		-		1.1	-			821,717		1,486,916	
Net Government Revenues		-			-			176,238		318,906	
Civilian Employees Expected to relocate		0			0			53		95	
Military Employees Expected to relocate		0	<i></i>		0			0		0	

## Socioeconomic Impacts Ft. Meade EIS Impacts During Operation

									Pr	oject #1			
									Recr	uiting B			
	Project #9: Bold Venture III		P	roject #10: Be	old Venture l	V	Me	edical D		Totals			
Characteristics & Assumptions		Value	% Im	bact		Value	% Imp	act		Value	% Impact		
Change in local expenditures	\$	7,026,817			\$	2,074,584			\$	-		\$	30,516,460
Local expenditures	3	,967,007.40			1	1,171,211.71				-		\$	17,228,146
Change in Civilian employment		210				62				-			912
Average income of civilian personnel	\$	46,309			\$	46,309			\$	46,309			
% Expected to relocate		25%				25%							
Change in military employment													
Export Income Multiplier		2.2965			L.	2.2965				2.2965			
Impacts													
Change in sales volume - Direct		11,217,530				3,311,842				-		\$	48,716,129
Change in sales volume - induced	\$	14,543,527			\$	4,293,803			\$	-		\$	63,160,462
Total	\$	25,761,057	0.10	7%	\$	7,605,645	0.03	2%	\$		0.000%	\$	111,876,591
Employment - Direct		60				18				-			261
Employment - Total		348	0.10	8%		103	0.03	2%		-	0.000%		1,510
Income - Direct		1,459,928				431,026				-		\$	6,340,260
Total Income - (place of work)		13,075,293	·			3,860,325				-		\$	56,784,130
Total Income - (place of residence)	\$	13,075,293	0.07	9%	\$	3,860,325	0.02	3%	\$	-	0.000%	\$	56,784,130
Local Population		141	0.02	4%		42	0.00	7%		-	0.000%		611
Local off-base population		141				42				-			611
Number of School Children		20				6				-			88
Demand for Housing - Rental		14		1		4				-			62
Demand for Housing - Owner Occupied		38.11643836				11.25342466				0			166
Government Expenditures	\$	645,479			\$	190,570			\$	-		\$	2,803,225
Government Revenues		821,717				242,602				-		\$	3,568,600
Net Government Revenues		176,238				52,032				-		\$	765,375
Civilian Employees Expected to relocate		53				16				0			228
Military Employees Expected to relocate		0	-			0				0			0

## **APPENDIX A**

# INTERAGENCY COORDINATION AND CORRESPONDENCE



Southwest Region, NMFS, 501 West Ocean Blvd., Suite 4200, Long Beach, CA 90802-4213 (310/980-4001);

Northwest Region, NMFS, 7600 Sand Point Way, NE, BIN C15700, Bldg., 1, Seattle, WA 98115-0070 (206/526-6150); and

Alaska Region, NMFS, P.O. Box 21668, Juneau, AK 99802–1668 (907/ 586–7221).

Dated: February 25, 2000.

Ann D. Terbush,

Chief, Permits and Documentation Division, Office of Protected Resources, National Marine Fisherles Service. [FR Doc. 00–5066 Filed 3–1–00: 8:45 am] BILLING CODE 3510-22-F

COMMODITY FUTURES TRADING COMMISSION

Applications of the Chicago Mercantile Exchange for Designation as a Contract Market for Futures and Options on the FORTUNE e-50 Index TM

AGENCY: Commodity Futures Trading Commission.

ACTION: Notice of availability of terms and conditions of proposed commodity futures and options contracts.

SUMMARY: The Chicago Mercantile Exchange (CME or Exchange) has applied for designation as a contract market for futures and options on the FORTUNE o-50 index™. The Acting Director of the Division of Economic Analysis (Division) of the Commission, acting pursuant to the authority delegated by Commission Regulation 140.96, has determined that publication of the proposals for comment is in the public interest, will assist the Commission in considering the views of interested persons, and is consistent with the purpose of the Commodity Exchange Act.

DATES: Comments must be received on or before April 3, 2000.

ADDRESSES: Interested persons should submit their views and comments to Jean A. Webb, Secretary, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street. NW, Washington, DC 20581. In addition, comments may be sent by facsimile transmission to facsimile number (202) 418-5521 or by electronic mail to secretary @cftc.gov. Reference should be made to the Chicago Mercantile Exchange (CME) for futures and options on the FORTUNE e-50 Index TM. FOR FURTHER INFORMATION CONTACT: Please contact Thomas Leahy of the Division of Economic Analysis,

Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street, NW., Washingotn, DC (202) 418–5278. Facsimile number: (202) 418–5527. Electronic mail: tleahy@cftc.gov

SUPPLEMENTARY INFORMATION: Copies of the terms and conditions will be available for inspection at the Office of the Secretariat, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street, NW., Washington, DC 20581. Copies of the terms and conditions can be obtained through the Office of the Secretariat by mail at the above address or by phone at (202) 418-5100.

Other materials submitted by the CME in support of the applications for contract market designation may be available upon request pursuant to the Freedom of Information Act (5 U.S.C. 552) and the Commission's regulations thereunder (17 CFR Part 145 (1997)) except to the extent they are entitled to confidential treatment as set forth in 17 CFR 145.5 and 145.9. Requests for copies of such materials should be made to the FOI, Privacy and Sunshine Act Compliance Staff of the Office of Secretariat at the Commission's headquarters in accordance with 17 CFR 145.7 and 145.8.

Any person interested in submitted written data, views, or arguments on the proposed terms and conditions, or with respect to other materials submitted by the CME should send such comments to Jean A. Webb, Secretary, Commodity Futures Trading Commission, Three Lafayette Centre, 1135 21st Street, NW. Washington, DC 20581 by the specified date.

Issued in Washington, DC, on February 25, 2000.

#### Richard A. Shilts,

Acting Director.

[FR Doc. 00-4967 Filed 3-1-00; 8:45 am] BILLING CODE 6361-01-M

#### DEPARTMENT OF DEFENSE

Department of the Army

#### Notice of Intent (NOI) To Prepare an Environmental Impact Statement for the Future Development and Operations at Fort Meade, MD

AGENCY: Department of the Army, DOD. ACTION: Notice of availability.

SUMMARY: The U.S. Army Fort George G. Meade, Maryland, announces its intent to prepare an Environmental Impact Statement (EIS) that will address the future development and operations of Fort Meade's Real Property Master Plan (RPMP) for the Years 2000-2004. The planned projects which will occur during this time include the following: construction of new facilities that will consolidate tenants from dilapidated World War II structures and off post leased facilities into more cost efficient and effective facilities, demolition and construction of barracks and mess halls and providing on post development opportunities for tenants on installations that are currently faced with Base Realignment and Closure. It is the purpose of this EIS to further assess the impacts, most specifically to air and traffic, that were identified in the **Environmental Assessment entitled** "Future Development and Operations Environmental Assessment" dated April 1999.

ADDRESSES: Questions or written comments may be forwarded to the U.S. Army Corps of Engineers, Baltimore District, Planning Division, Planning and Environmental Services Branch (Attn: Ft. Meade EIS), 10 South Howard Street, P.O. Box 1715, Baltimore, Maryland 21203-1715, Telephone (410) 962-4939.

FOR FURTHER INFORMATION CONTACT: Mr. Jim Gebhardt, Environmental Engineer, Directorate of Public Works Environmental Management Office, at (301) 677–9365.

**SUPPLEMENTARY INFORMATION:** The Fort Meade RPMP has the potential to significantly impact certain natural, economic, social and cultural resources of the Fort Meade community. The objective is to prepare a comprehensive EIS which will serve as a planning tool, a public information source and a reference for mitigation tracking.

Alternatives may consist of alternate locations for specific projects, partial Implementation of the specific project or modifications to the specific project. The alternatives will be developed during the preparation of the Draft EIS (DEIS) as a result of public input and the environmental analysis of the proposals within the plan. The objective Fort Meade's DEIS is to identify and evaluate any environmental implications that may result from developing the Master Plan. The DEIS will describe the impacts of existing environmental, cultural and natural resources, social, economic and environmental justice conditions associated with the proposed projects at Fort Meade.

The Army will initiate a scoping process to discuss significant issues related to the DEIS through public meetings and local publications. These efforts are designed to encourage public input that will inevitably help determine and better define the underlying issues of the DEIS. Planned public meetings will be announced through local publications and online Internet access in advance of any proposed action, announcing meeting time and location.

A public meeting will be held on Fort Meede to fectilitate input to the EIS process by citizens and organizations. The date and time of these meetings will be announced in the general media and will be at times and locations convenient to the public. To be considered in the Draft EIS, comments and suggestions should be received not later than 15 days following the public scoping meeting.

Significant issues: Within Fort Meade's boundaries lie numerous historic and prehistoric sites that were identified through the Cultural **Resources Management Plan. Fort** Meade also maintains historically significant structures which are eligible for Inclusion on the National Register and may be directly affected by the actions proposed in the long range Master Plan. Equally important is the impact Fort Meade has on the Chesapeake Bay and the crucial role it plays in maintaining and protecting which is considered one of the world's most diverse ecosystems. Fort Meade is also home to eleven State Endangered Species, including the Glassy Darter which is one of only two locations in the State of Maryland where the fish is known to exist.

Dated: February 24, 2000

Raymond J. Faiz,

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Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health) OASA(I&E).

[FR Doc. 00-5082 Filed 3-1-00; 8:45 am] alLING CODE 3710-08-M

#### DEPARTMENT OF EDUCATION

#### National Assessment Governing Board; Information Collection Request

AGENCY: National Assessment Governing Board; Department of Education.

**ACTION:** Notice of amended information collection request.

SUMMARY: The National Assessment Governing Board (NAGB) is amending the Notices of Proposed Information Collection Request (ICR) published on January 18, 2000 and revised on February 18, 2000. The present notice is to inform the public that the Governing Board has cancelled one of two proposed research studies. The study that was cancelled is on the feasibility of establishing a calibration linkage between a test form resembling an individual test and a survey of group results---the National Assessment of Educational Progress. The study is described in the January 18 and February 18, 2000 notices.

ADDRESSES: Written comments should be addressed to the Office of Information and Regulatory Affairs; Attention: Danny Werfel, Desk Officer: Department of Education; Office of Management and Budget; 725 17th Street, N.W., Room 10235; New Executive Office Building; Washington, D.C. 20503 or should be electronically mailed to the internet address DWERFEL@OMB.EOP.GOV. Submit written comments, on or before March 17, 2000, identified by "ICR: VNT **Research and Validation Support** Studies (Option Year 2)." The National **Assessment Governing Board will** forward to OMB any comments received from the public in response to the January 18, 2000 notice inviting requests for public comment on this ICR.

SUPPLEMENTARY INFORMATION: Section 3506 of the Act (44 U.S.C. Chapter 35) requires that the Director of OMB provide interested federal agencies and the public an early opportunity to comment on information collection requests. The Office of Management and Budget (OMB) may amend or waive the requirement for public consultation to the extent that public participation in the approval process would defeat the purpose of the information collection, violate State or federal law, or substantially interfere with any agoncy's ability to perform its statutory obligations. In compliance with the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), this notice amends a proposed information collection request (ICR) of the National Assessment Governing Board (the Governing Board, or NAGB) published on January 18, 2000 and revised on February 18, 2000. The information collection is to conduct a research and validation support study related to test development for the proposed Voluntary National Test (VNT) during Spring 2000.

ADDITIONAL INFORMATION: Copies of this ICR may be obtained from Ray Fields, Assistant Director, National Assessment Governing Board, Suite 825, 800 North Capitol Street, NW., Washington, DC 20002. Telephone: (202) 357–0395; email: Ray\_Fields@ED.Gov. Deted: February 28, 2000. Roy Truby, Executive Director, National Assessment Governing Board. [FR Doc. 00-5072 Filed 3-1-00; 8:45 am] BILLING CODE 4000-01-M

#### DEPARTMENT OF EDUCATION

#### National Educational Research Policy and Priorities Board; Quarterly Meeting

AGENCY: National Educational Research Policy and Priorities Board; Education. ACTION: Notice of Meeting

SUMMARY: This notice sets forth the schedule and proposed agenda of a forthcoming quarterly meeting of the National Educational Research Policy and Priorities Board. Notice of this meeting is required under Section 10(a)(2) of the Federal Advisory Committee Act. This document is intended to notify the general public of their opportunity to attend the meeting. DATES: March 16, 2000.

TIME: 9 a.m. to 5 p.m.

LOCATION: Room 100, 80 F St., NW., Washington, DC 20208-7564.

FOR FURTHER INFORMATION CONTACT: Thelma Leenhouts, Designated Federal Official, National Educational Research Policy and Priorities Board, Washington, DC 20208-7564. Tel.: (202) 219-2065; fax (202) 219-1528; e-mail: Thelma\_Leenhouts@ed.gov, or nerpph@ed.gov. The main telephone number for the Board is (202) 208-0692. SUPPLEMENTARY INFORMATION: The National Educational Research Policy and Priorities Board is authorized by Section 921 of the Educational Research, Development, Dissemination, and Improvement Act of 1994. The Board works collaboratively with the Assistant Secretary for the Office of **Educational Research and Improvement** (OERI) to forge a national consensus with respect to a long-term agenda for educational research, development, and dissemination, and to provide advice and assistance to the Assistant Secretary in administering the duties of the Office. The meeting is open to the public. Individuals who will need accommodations for a disability in order to attend the meeting (i.e., interpreting services, assistive listening devices, materials in alternative format) should notify Thelma Leenhouts at (202) 219-2065 by no later than March 9. We will attempt to meet requests after this date, but cannot guarantee availability of the requested accommodation. The meeting site is accessible to individuals with disabilities.

11293

PARRIS N. GLENDENING, Governor HENRY A. VIRTS, D.V.M., Secretary



The Wayne A. Cawley, Jr. Building 50 HARRY S. TRUMAN PARKWAY ANNAPOLIS, MARYLAND 21401 Baltimore/Annapolis (410) 841-5700 Washington (301) 261-8106 Facsimile (410) 841-5914 MD Relay 1-800-735-2258 e-mail address http://www.mda.state.md.us

### STATE OF MARYLAND DEPARTMENT OF AGRICULTURE

July 27, 1998

Ms. Emily C. Rzemien Versar Task Manager Versar, Inc. 9200 Rumsey Road Columbia, MD 21045-1934

#### RE: Fort George G. Meade - Environmental Assessment

Dear Ms. Rzemien:

Thank you for the opportunity to review and comment on the above-referenced project. The Maryland Department of Agriculture has no comments regarding the proposed action.

Should you have any questions, do not hesitate to call me at 410/841-5880.

Sincerely,

Henry A. Virts, D.V.M. Secretary

HAV:mej



Parris N. Glendening Governor Maryland Department of Natural Resources Forest, Wildlife and Heritage Service Tawes State Office Building Annapolis, Maryland 21401

August 3, 1998

John R. Griffin Secretary

Carolyn D. Davis Deputy Secretary

Ms. Emily C. Rzemien Versar, Inc. 9200 Rumsey Road Columbia, MD 21045-1934

### RE: Future Activities Proposed for Fort George G. Meade as Described Within Current Master Plan, Anne Arundel County

Dear Ms. Rzemien:

The Wildlife and Heritage Division has no records for Federal or State rare, threatened or endangered plants or animals within any of the specified project sites. This statement should not be interpreted as meaning that no rare, threatened or endangered species are present. Such species could be present but have not been documented because an adequate survey has not been conducted or because survey results have not been reported to us.

Sincerely, Muthael E. Slattery CAB for

Michael E. Slattery, Director, Wildlife & Heritage Division

cc: R. Dintaman, DNR ER# 98.1091.aa

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Telephone: <u>(410) 260-8540</u> DNR TTY for the Deaf: 410-974-3683


Parris N. Glendening Governor

## Maryland Department of Natural Resources ENVIRONMENTAL REVIEW

Tawes State Office Building Annapolis, Maryland 21401

August 5, 1998

Emily C. Rzemien Versar Task Manager Versar, Inc. 9200 Rumsey Road Columbia, MD 21045-1934

Dear Ms. Rzemien:

Thanks you for the opportunity to review and comment on the proposed action at Fort George G. Meade in preparation for development of an Environmental Assessment (EA) by the installation and the U.S. Army Corps of Engineers, Baltimore District. The proposed action has been reviewed by the various units of the Department. The following information is provided for your use in preparing the subject EA:

## Little Patuxent River

A portion of the main stem of the Little Patuxent River, could be impacted by activities that occur at Fort Meade. Little Patuxent River and its tributaries are classified as Use I waters. Use I waters are protected for water contact recreation and aquatic life.

## Anadromous fish

Anadromous fish species, including white perch (<u>Morone americana</u>), yellow perch (<u>Perca flavescens</u>), and herring (<u>Alosa sp</u>.) have been documented spawning in the Little Patuxent River. These anadromous fish may also reach the lower portions of tributaries in the study area. All of these waters are considered to be sensitive habitats because of potential anadromous fish spawning in this area.

## Resident fish populations

A list of resident fish species (Table B1-4), which have been documented in the Little Patuxent River by our Maryland Biological Stream Survey project, is attached for your information. Tributaries in your study area, that have perennial flow, may support populations of many of these

DNR TTY for the Deaf: (410) 974-3683

Telephone:

John R. Griffin Secretary

Carolyn D. Davis Deputy Secretary