MEMORANDUM OF AGREEMENT BETWEEN THE ENVIRONMENTAL PROTECTION AGENCY AND THE DEPARTMENT OF THE ARMY CONCERNING THE DETERMINATION OF MITIGATION UNDER THE CLEAN WATER ACT SECTION 404(b)(1) GUIDELINES

I. Purpose

The United States Environmental Protection Agency (EPA) and the United States Department of the Army (Army) hereby articulate the policy and procedures to be used in the determination of the type and level of mitigation necessary to demonstrate compliance with the Clean Water Act (CWA) Section 404(b)(1) Guidelines ("Guidelines"). This Memorandum of Agreement (MOA) expresses the explicit intent of the Army and EPA to implement the objective of the CWA to restore and maintain the chemical, physical, and biological integrity of the Nation's waters, including wetlands. This MOA is specifically limited to the Section 404 Regulatory Program and is written to provide guidance for agency field personnel on the type and level of mitigation which demonstrates compliance with requirements in the Guidelines. The policies and procedures discussed herein are consistent with current Section 404 regulatory practices and are provided in response to questions that have been raised about how the Guidelines are implemented. The MOA does not change the substantive requirements of the Guidelines. It is intended to provide guidance regarding the exercise of discretion under the Guidelines.

Although the Guidelines are clearly applicable to all discharges of dredged or fill material, including general permits and Corps of Engineers (Corps) civil works projects, this MOA focuses on standard permits (33 CFR 325.5(b)(1))[1]. This focus is intended solely to reflect the unique procedural aspects associated with the review of standard permits, and does not obviate the need for other regulated activities to comply fully with the Guidelines. EPA and Army will seek to develop supplemental guidance for other regulated activities consistent with the policies and principles established in this document.

This MOA provides guidance to Corps and EPA personnel for implementing the Guidelines and must be adhered to when considering mitigation requirements for standard permit applications. The Corps will use this MOA when making its determination of compliance with the Guidelines with respect to mitigation for standard permit applications. EPA will use this MOA in developing its positions on compliance with the Guidelines for

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[1]Standard permits are those individual permits which have been processed through application of the Corps public interest review procedures (33 CFR 325) and EPA's Section 404(b)(1) Guidelines, including public notice and receipt of comments. Standard permits do not include letters of permission, regional permits, nationwide permits, or programmatic permits.

proposed discharges and will reflect this MOA when commenting on standard permit applications.

II. Policy

A. The Council on Environmental Quality (CEQ) has defined mitigation in its regulations at 40 CFR 1508.20 to include: avoiding impacts, minimizing impacts, rectifying impacts, reducing impacts over time, and compensating for impacts. The Guidelines establish environmental criteria which must be met for activities to be permitted under Section 404.[2] The types of mitigation enumerated by CEQ are compatible with the requirements of the Guidelines; however, as a practical matter, they can be combined to form three general types: avoidance, minimization and compensatory mitigation. The remainder of this MOA will speak in terms of these more general types of mitigation.

B. The Clean Water Act and the Guidelines set forth a goal of restoring and maintaining existing aquatic resources. The Corps will strive to avoid adverse impacts and offset unavoidable adverse impacts to existing aquatic resources, and for wetlands, will strive to achieve a goal of no overall net loss of values and functions. In focusing the goal of no overall net loss to wetlands only, EPA and Army have explicitly recognized the special significance of the nation's wetlands resources. This special recognition of wetlands resources does not in any manner diminish the value of other waters of the United States, which are often of high value. All waters of the United States, such as streams, rivers, lakes, etc., will be accorded the full measure of protection under the Guidelines, including the requirements for appropriate and practicable mitigation. The determination of what level of mitigation constitutes "appropriate" mitigation is based solely on the values and functions of the aquatic resource that will be impacted. "Practicable" is defined at Section 230.3(q) of the Guidelines.[3] However, the level of mitigation determined to be appropriate and practicable under Section 230.10(d) may lead to individual permit decisions which do not fully meet this goal because the mitigation measures necessary to meet this goal are not feasible, not practicable, or would accomplish only inconsequential reductions in impacts. Consequently, it is recognized that no net loss of wetlands functions and values may not be achieved in each and every permit action. However, it remains a goal of the Section 404 regulatory program to contribute to the national goal of no overall net loss of the nation's remaining wetlands base. EPA and Army are committed to working with others through the Administration's interagency task force and other avenues to help achieve this national goal.

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[2](except where Section 404(b)(2) applies).

[3]Section 230.3(q) of the Guidelines reads as follows: "The term practicable means available and capable of being done after taking into consideration *cost, existing technology, and logistics in light of overall project purposes.*" (Emphasis supplied)

C. In evaluating standard Section 404 permit applications, as a practical matter, information on all facets of a project, including potential mitigation, is typically gathered and reviewed at the same time. The Corps, except as indicated below, first makes a determination that potential impacts have been avoided to the maximum extent practicable; remaining unavoidable impacts will then be mitigated to the extent appropriate and practicable by requiring steps to minimize impacts and, finally, compensate for aquatic resource values. This sequence is considered satisfied where the proposed mitigation is in accordance with specific provisions of a Corps and EPA approved comprehensive plan that ensures compliance with the compensation requirements of the Section 404(b)(1) Guidelines (examples of such comprehensive plans may include Special Area Management Plans, Advance Identification areas (Section 230.80), and State Coastal Zone Management Plans). It may be appropriate to deviate from the sequence when EPA and the Corps agree the proposed discharge is necessary to avoid environmental harm (e.g., to protect a natural aquatic community from saltwater intrusion, chemical contamination, or other deleterious physical or chemical impacts), or EPA and the Corps agree that the proposed discharge can reasonably be expected to result in environmental gain or insignificant environmental losses.

In determining "appropriate and practicable" measures to offset unavoidable impacts, such measures should be appropriate to the scope and degree of those impacts and practicable in terms of cost, existing technology, and logistics in light of overall project purposes. The Corps will give full consideration to the views of the resource agencies when making this determination.

1. Avoidance.[4] Section 230.10(a) allows permit issuance for only the least environmentally damaging practicable alternative.[5] The thrust of this section on alternatives is avoidance of impacts. Section 230.10(a) requires that no discharge shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact to the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. In addition, Section 230.10(a)(3) sets forth rebuttable presumptions that 1) alternatives for non-water dependent activities that do not involve special aquatic sites[6] are available and 2) alternatives that do not involve special aquatic sites have less adverse impact on the aquatic environment.

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[4]Avoidance as used in the Section 404(b)(1) Guidelines and this MOA does not include compensatory mitigation.

[5]It is important to recognize that there are circumstances where the impacts of the project are so significant that even if alternatives are not available, the discharge may not be permitted regardless of the compensatory mitigation proposed (40 CFR 230.10(c)).

[6]Special aquatic sites include sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs and riffle pool complexes.

Compensatory mitigation may not be used as a method to reduce environmental impacts in the evaluation of the least environmentally damaging practicable alternatives for the purposes of requirements under Section 230.10(a).

2. Minimization. Section 230.10(d) states that appropriate and practicable steps to minimize the adverse impacts will be required through project modifications and permit conditions. Subpart H of the Guidelines describes several (but not all) means for minimizing impacts of an activity.

3. Compensatory Mitigation. Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain after all appropriate and practicable minimization has been required. Compensatory actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands) should be undertaken, when practicable, in areas adjacent or contiguous to the discharge site (on-site compensatory mitigation). If on-site compensatory mitigation is not practicable, off-site compensatory mitigation should be undertaken in the same geographic area if practicable (i.e., in close physical proximity and, to the extent possible, the same watershed). In determining compensatory mitigation, the functional values lost by the resource to be impacted must be considered. Generally, in-kind compensatory mitigation is preferable to out-of-kind. There is continued uncertainty regarding the success of wetland creation or other habitat development. Therefore, in determining the nature and extent of habitat development of this type, careful consideration should be given to its likelihood of success. Because the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, restoration should be the first option considered.

In the situation where the Corps is evaluating a project where a permit issued by another agency requires compensatory mitigation, the Corps may consider that mitigation as part of the overall application for purposes of public notice, but avoidance and minimization shall still be sought.

Mitigation banking may be an acceptable form of compensatory mitigation under specific criteria designed to ensure an environmentally successful bank. Where a mitigation bank has been approved by EPA and the Corps for purposes of providing compensatory mitigation for specific identified projects, use of that mitigation bank for those particular projects is considered as meeting the objectives of Section II.C.3 of this MOA, regardless of the practicability of other forms of compensatory mitigation. Additional guidance on mitigation banking will be provided. Simple purchase or "preservation" of existing wetlands resources may in only exceptional circumstances be accepted as compensatory mitigation. EPA and Army will develop specific guidance for preservation in the context of compensatory mitigation at a later date.

III. Other Procedures

A. Potential applicants for major projects should be encouraged to arrange preapplication meetings with the Corps and appropriate federal, state or Indian tribal, and local authorities to determine requirements and documentation required for proposed permit evaluations. As a result of such meetings, the applicant often revises a proposal to avoid or minimize adverse impacts after developing an understanding of the Guidelines requirements by which a future Section 404 permit decision will be made, in addition to gaining an understanding of other state or tribal, or local requirements. Compliance with other statutes, requirements and reviews, such as NEPA and the Corps public interest review, may not in and of themselves satisfy the requirements prescribed in the Guidelines.

B. In achieving the goals of the CWA, the Corps will strive to avoid adverse impacts and offset unavoidable adverse impacts to existing aquatic resources. Measures which can accomplish this can be identified only through resource assessments tailored to the site performed by qualified professionals because ecological characteristics of each aquatic site are unique. Functional values should be assessed by applying aquatic site assessment techniques generally recognized by experts in the field and/or the best professional judgment of federal and state agency representatives, provided such assessments fully consider ecological functions included in the Guidelines. The objective of mitigation for unavoidable impacts is to offset environmental losses. Additionally for wetlands, such mitigation should provide, at a minimum, one for one functional replacement (i.e., no net loss of values), with an adequate margin of safety to reflect the expected degree of success associated with the mitigation plan, recognizing that this minimum requirement may not be appropriate and practicable, and thus may not be relevant in all cases, as discussed in Section II.B of this MOA.[7] In the absence of more definitive information on the functions and values of specific wetlands sites, a minimum of 1 to 1 acreage replacement may be used as a reasonable surrogate for no net loss of functions and values. However, this ratio may be greater where the functional values of the area being impacted are demonstrably high and the replacement wetlands are of lower functional value or the likelihood of success of the mitigation project is low. Conversely, the ratio may be less than 1 to 1 for areas where the functional values associated with the

[7]For example, there are certain areas where, due to hydrological conditions, the technology for restoration or creation of wetlands may not be available at present, or may otherwise be impracticable. In addition, avoidance, minimization, and compensatory mitigation may not be practicable where there is a high proportion of land which is wetlands. EPA and Army, at present, are discussing with representatives of the oil industry, the potential for a program of accelerated rehabilitation of abandoned oil facilities on the North Slope to serve as a vehicle for satisfying necessary compensation requirements.

area being impacted are demonstrably low and the likelihood of success associated with the mitigation proposal is high.

C. The Guidelines are the environmental standard for Section 404 permit issuance under the CWA. Aspects of a proposed project may be affected through a determination of requirements needed to comply with the Guidelines to achieve these CWA environmental goals.

D. Monitoring is an important aspect of mitigation, especially in areas of scientific uncertainty. Monitoring should be directed toward determining whether permit conditions are complied with and whether the purpose intended to be served by the condition is actually achieved. Any time it is determined that a permittee is in non-compliance with mitigation requirements of the permit, the Corps will take action in accordance with 33 CFR Part 326. Monitoring should not be required for purposes other than these, although information for other uses may accrue from the monitoring requirements. For projects to be permitted involving mitigation with higher levels of scientific uncertainty, such as some forms of compensatory mitigation, long term monitoring, reporting and potential remedial action should be required. This can be required of the applicant through permit conditions.

E. Mitigation requirements shall be conditions of standard Section 404 permits. Army regulations authorize mitigation requirements to be added as special conditions to an Army permit to satisfy legal requirements (e.g., conditions necessary to satisfy the Guidelines) [33 CFR 325.4(a)]. This ensures legal enforceability of the mitigation conditions and enhances the level of compliance. If the mitigation plan necessary to ensure compliance with the Guidelines is not reasonably implementable or enforceable, the permit shall be denied.

F. Nothing in this document is intended to diminish, modify or otherwise affect the statutory or regulatory authorities of the agencies involved. Furthermore, formal policy guidance on or interpretation of this document shall be issued jointly.

G. This MOA shall take effect on February 7, 1990, and will apply to those completed standard permit applications which are received on or after that date. This MOA may be modified or revoked by agreement of both parties, or revoked by either party alone upon six (6) months written notice.

2/6/90

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SECTION 404(b)(1) GUIDELINES MITIGATION MOA "QUESTIONS AND ANSWERS"

Q1. Is the MOA a wetlands mitigation policy?

A1. No. The purpose of the MOA is to provide general guidance to Corps and EPA field offices on 404(b)(1) Guidelines mitigation requirements for standard permit applications in all waters of the United States, including wetlands. As such, the guidance reflects agency policy and procedures but does not itself, establish new policy.

Q2. Does the MOA establish a No Net Loss of wetlands policy?

A2. The MOA is not, in itself, a no net loss policy and neither the Section 404 program in general, nor the MOA in particular, is designed to achieve the national goal of no overall net loss of wetlands. EPA and the Corps will strive to achieve the President's goal of no net loss; however, the MOA clearly recognizes that mitigation which is not appropriate or practicable will not be required, nor will each permit be required to achieve no net loss of wetlands.

Q3. What is mitigation sequencing?

A3. In the context of the Guidelines and the MOA it means first avoiding impacts through the selection of the least damaging practicable alternative; second, taking appropriate and practicable steps to minimize impacts; and finally compensating for any remaining unavoidable impacts to the extent appropriate and practicable.

Q4. Does sequencing mean you have to first pass 230.10(a), then 230.10(b), then 230.10(c), and finally 230.10(d)?

A4. No. While sequencing (i.e., avoidance, minimization, compensation) incorporates the requirements of Sections 230.10 (a) and (d), the requirements identified at Sections 230.10 (b) and (c) are not components of mitigation under the Guidelines.

Q5. What does the one for one functional replacement signify?

A5. The objective of wetlands compensatory mitigation is to provide, at a minimum, one for one functional replacement to achieve no net loss of wetland values. In the absence of more definitive information on the functions and values at a specific site, a minimum of 1 to 1 acreage replacement may be used as a reasonable surrogate for no net loss of functions and values. However, the MOA recognizes that this ratio may vary on a case-by-case basis and may not be appropriate and practicable in all cases.

Q6. Is it possible to issue a permit that causes a net loss of wetlands?

A6. Yes. Once a project passes 230.10(a),(b), and (c) of the Guidelines (also reference question number 4), a wetlands loss may occur when mitigation measures are not feasible, practicable or would accomplish only inconsequential reductions in impacts. However, it should be emphasized that a project that causes or contributes to significant degradation of the waters of the United States will fail 230.10(c) notwithstanding the exceptions for 230.10(d) noted in the above sentence.

Q7. Have the definitions of the terms "appropriate" and "practicable" been changed?

A7. No. Section 230.3(q) of the Guidelines defines the term practicable as meaning "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." Since the term appropriate is not explicitly defined in the Guidelines or Corps regulations, its meaning was clarified in the MOA to mean "appropriate to the scope and degree" of environmental impacts of a project (also reference question number 8).

Q8. Is appropriate mitigation based solely on the values and functions of the aquatic resource that will be impacted?

A8. Yes. A key objective of the Guidelines and the MOA is to offset unavoidable adverse impacts to aquatic resources. The determination of what level of mitigation constitutes "appropriate" mitigation is based solely on the values and functions of the aquatic resource that will be impacted. Further, under the Guidelines, appropriate

mitigation is required only to the extent that it is practicable. Public interest characteristics such as need and societal value are not factored into a determination of appropriate mitigation as determined by the Guidelines. Such considerations are, however, taken into account during the public interest review process.

Q9. Is there a preferred method for assessing functional values of aquatic resources?

A9. Not at this time. The Wetland Evaluation Technique (WET) considers a broad range of ecological functions and its use will likely increase. We realize that WET needs additional refinement and regionalization, both of which are underway. However, the best professional judgment of the Corps, EPA and resource agencies' representatives must continue to play a vital role in all resource assessments.

Q10. Is there sufficient flexibility built into the MOA to reflect the technical challenges represented in Alaska?

A10. Yes. EPA and the Corps recognize that the physical characteristics associated with wetlands underlain by permafrost pose scientific challenges regarding compensatory mitigation. Permafrost conditions, hydrology and climatic factors create technical problems which may make opportunities for wetlands creation and restoration not always practicable. The MOA states (see Section II.B.) that only appropriate and practicable mitigation is required under the Guidelines and, as a result, no net loss of wetlands functions and values may not be achieved in each and every permit action. This technical uncertainty emphasizes the need for Corps and EPA staff in Alaska to coordinate through established procedures such as the Abbreviated Permit Process and pre-application consultations to identify what is appropriate and practicable compensatory mitigation on a case-by-case basis.

Q11. Are there other areas of the country that also represent special challenges in the implementation of the MOA?

A11. Yes. In developing the MOA, the Corps and EPA recognized that the flexibility built into the Guidelines must also be incorporated into the provisions contained in the MOA in order to be responsive to varying ecological conditions that exist nationwide. An issue that has been

brought to our attention is how the MOA will affect certain environmental projects in Louisiana (projects where the specific purpose is to enhance the environment). The MOA recognizes these situations by providing that where EPA and the Corps agree, it may be appropriate to deviate from the mitigation sequence in circumstances "necessary to avoid environmental harm (e.g., to protect a natural aquatic community from saltwater intrusion...)."

Q12. Will mitigation banks and preservation of existing wetlands be allowed?

A12. The MOA recognizes that mitigation banking may be an acceptable form of compensatory mitigation. EPA and Army are developing additional guidance on this subject. In the meantime, mitigation banks will be considered for approval on a case-by-case basis as they have been in the past. Simple purchase or "preservation" may be acceptable only in exceptional circumstances. EPA and the Corps will develop specific guidance for preservation in the context of compensatory mitigation at a later date.

Q13. How will the MOA affect applications in process?

A13. It doesn't. It applies to completed applications which are received on or after 7 February 1990.

Q14. Must an alternatives analysis and/or compensatory mitigation plan be completed before a public notice can be issued?

A14. No. The Corps regulations and application form are fairly specific about what information is needed to find an application complete. Information necessary to conduct a complete Guidelines or Public Interest Review is not required for the issuance of a public notice. If such information is provided by the applicant, however, it should be summarized and presented in the public notice.

Q15. Is it necessary to issue a new public notice for discharges of fill material associated with a compensatory mitigation plan, or part of a plan, that was not included in the original notice?

A15. Generally no. However, this is a judgment call and if the proposed changes result in a substantial increase in the scope of the overall project or there has been a demonstrated interest by the public, an additional notice may be required.

Q16. To what extent must the Corps coordinate changes in a proposed project, including mitigation plans, with the resource agencies?

A16. In general, all substantive changes should be coordinated. The Corps is responsible for determining the appropriate amount of coordination, keeping in mind that insufficient coordination is a criterion for permit elevation under the 404(q) MOAs.

Q17. Is the Corps still responsible for determining compliance with the 404(b)(1) Guidelines on a permit-by-permit basis?

A17. Yes. As in the past, Guidelines compliance determinations are the responsibility of the Corps. EPA will continue to respond to public notices as it has in the past using the MOA to develop its position (recommendations) on projects.

Q18. Does the MOA require the Corps to take an enforcement action whenever it discovers non-compliance with the mitigation requirements of a permit?

A18. No. The Corps is required to take action in accordance with 33 CFR Part 326 which establishes a discretionary responsibility regarding the initiation of enforcement actions. The Corps, as part of a new emphasis on permit compliance, is strongly encouraged to take appropriate action to ensure compliance with all permit conditions, particularly conditions imposed to satisfy the Guidelines. The MOA does not affect this initiative.

Q19. Does the MOA apply to after-the-fact applications?

A19. Yes.

Q20. How does the MOA affect Corps civil works projects?

A20. While the MOA focuses on the Section 404 regulatory program, the Corps plans to integrate the mitigation framework provided in the MOA into all Corps activities.