

REVIEW PLAN

**Calumet Harbor and River, Illinois and Indiana
Dredged Material Management Plan**

Chicago District

MSC Approval Date: 4 October 2012

Last Revision Date: None



**US Army Corps
of Engineers®**

REVIEW PLAN

**Calumet Harbor and River, Illinois and Indiana
Dredged Material Management Plan**

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1. PURPOSE AND REQUIREMENTS

a. **Purpose.** This Review Plan defines the scope and level of peer review for the Dredged Material Management Plan for Calumet Harbor and River, Illinois and Indiana.

b. References

- (1) Engineering Circular (EC) 1165-2-209, Civil Works Review Policy, 31 Jan 2010
- (2) EC 1105-2-412, Assuring Quality of Planning Models, 31 Mar 2011
- (3) Engineering Regulation (ER) 1110-1-12, Quality Management, 30 Sep 2006
- (4) ER 1105-2-100, Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1, 20 Nov 2007
- (5) Calumet Harbor and River Dredged Material Management Plan Scope of Work, Updated September 2012
- (6) Calumet Harbor and River Dredged Material Management Plan Quality Control Plan, September 2012

c. **Requirements.** This review plan was developed in accordance with EC 1165-2-209, which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and operation, maintenance, repair, replacement and rehabilitation (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

The RMO is responsible for managing the overall peer review effort described in this Review Plan. The RMO for decision documents is typically either a Planning Center of Expertise (PCX) or the Risk Management Center (RMC), depending on the primary purpose of the decision document. The RMO for the peer review effort described in this Review Plan is Inland Navigation Planning Center of Expertise (PCX-IN).

The RMO will coordinate with the Cost Engineering Directory of Expertise (DX) to ensure the appropriate expertise is included on the review teams to assess the adequacy of cost estimates, construction schedules and contingencies.

3. STUDY INFORMATION

a. **Decision Document.** The Calumet Harbor and River Dredged Material Management Plan (DMMP) Study will produce a DMMP Report and integrated Environmental Assessment. The report will identify a recommended plan for the management of dredged material from Calumet Harbor and River for at least the next twenty years. USACE policy (ER 1105-2-100, E-15.a) is to accomplish disposal of dredged material in the least costly manner that is consistent with sound engineering practices and environmental standards. The DMMP Report will include an Environmental Assessment (EA) of the alternative plans. If the EA determines that there are significant

environmental effects, the EA will be converted to an Environmental Impact Statement (EIS). HQUSACE is responsible for final approval of the DMMP. The DMMP will not require Congressional authorization.

- b. Study/Project Description.** The DMMP will develop a plan to address disposal needs for material dredged from the Calumet Harbor and River channel for at least the next twenty years. The plan is a single-purpose project focused on meeting the disposal needs of the harbor.

Calumet Harbor is located on Lake Michigan in the City of Chicago, Illinois. The project is comprised on an Approach Channel and Outer Harbor Channel, protected by two miles of breakwater, and a River Channel. The channel is 4.4 miles long within the Harbor and extends 6.7 miles up the Calumet River to Lake Calumet. Along the River Channel are three turning basins that are also maintained as part of the Federal navigation channel. Authorized depths, with respect to Lake Michigan Low Water Datum (ILGD 1985), are 29 feet in the Approach Channel, 28 feet in the Outer Harbor and 27 feet in the River. The Chicago Area Confined Disposal Facility (CDF) is maintained by the USACE at the mouth of the river, along with a garage facility and stone dock.

Maintenance dredging of the channel produces an average yearly volume of approximately 50,000 cubic yards of material. Elevated levels of contaminants including metals, PCBs and PAHs in the sediment preclude open-lake placement of the material. Currently, dredged sediment is placed in the CDF. Within the next five years the CDF will be full, creating the need for the development of a management plan for the material generated through ongoing maintenance dredging.

The following measures will be screened and evaluated in the development of the DMMP:

- management of the existing CDF to extend its life
- potential new disposal locations
- measures to reduce dredging requirements; and
- an assessment of potential beneficial uses of the dredged material.

As a preliminary estimate, the recommended plan is expected to cost anywhere between \$40,000,000 and \$60,000,000.

There are a variety of interests in the maintenance of Calumet Harbor and River, including public and private entities and the citizens of the Chicago Metropolitan Area. The primary public entities are the Illinois International Port District, the Chicago Park District, and the City of Chicago. The Illinois International Port District is likely to sponsor plan implementation.

- c. Factors Affecting the Scope and Level of Review.** Challenges expected in the development of the DMMP include:
- Evaluating sediment treatment technologies used to remediate elevated levels of contamination in the sediment. These technologies are relatively new and, while some have been used successfully for treating material dredged from other harbors, the sediment dredged from each project has unique physical properties and contaminant levels. Careful assessment of the applicability of these technologies for Calumet sediment will be required.
 - Identifying cost-effective beneficial uses for the sediment, with or without sediment treatment.

Other factors will not be significant challenges:

- Risks associated with this project are expected to be low. Assessment and minimization of risks associated with dredging and placement of contaminated material is well established and regulated.

- d. In-Kind Contributions.** Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. DMMP's are conducted at full Federal expense. No in-kind products or analyses by non-Federal sponsors will be provided.

4. DISTRICT QUALITY CONTROL (DQC)

All decision documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home MSC. DQC will be conducted according to the requirements of the Great Lakes and Ohio River Division Regional Business Process for Quality Control/Quality Assurance Procedures for Civil Works (RMBP 08504).

- a. Documentation of DQC.** DQC shall be documented in the District electronic files as outlined in the Calumet Harbor and River Dredged Material Management Plan Quality Control Plan.
- b. Products to Undergo DQC.** The DMMP Report, Environmental Assessment and Technical Appendices will be subject to DQC.

5. AGENCY TECHNICAL REVIEW (ATR)

ATR is mandatory for all decision documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. ATR is managed within USACE by the designated RMO and is conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home MSC.

- a. Products to Undergo ATR.** ATR for the Preliminary Assessment, DMMP Study, and EA will be led by the Inland Navigation Center of Expertise (PCX-IN). The ATR team will provide comments on Feasibility Scoping Meeting (FSM) documentation, Alternative Formulation Briefing (AFB) documentation, and the Draft Report.

b. Required ATR Team Expertise.

ATR Team Members/Disciplines	Expertise Required
ATR Lead	The ATR lead should be a senior professional with extensive experience in preparing Civil Works decision documents and conducting ATR. The lead should also have the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).
Planning	Team member will have strong knowledge of current planning policies and guidance and extensive experience with weighing costs and benefits, screening measures, and plan formulation.
Environmental Engineering	Team member will be an expert in the field of environmental engineering and have a thorough understanding of issues related to sediment quality, treatment technologies, disposal methods, and beneficial use applications. Team member will also be an expert in the assessment of risks associated with Hazardous, Toxic, and Radioactive Waste (HTRW).
Economics	Team member will have a strong understanding of economic models and studies related to inland navigation.
Cost Engineering/Civil Design	Team member will have a strong knowledge of cost estimating practices for construction projects and civil design procedures.
Geotechnical Engineer	Team member will have a strong knowledge of subsurface soil classifications and stability analysis as well as settlement and seepage properties.
Operations	Team member will be an expert in dredging operations.

c. Documentation of ATR. DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

- (1) The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;
- (2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed;
- (3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
- (4) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A Statement of Technical Review should be completed, based on work reviewed to date, for the AFB, draft report, and final report. A sample Statement of Technical Review is included in Attachment 2.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

IEPR may be required for decision documents under certain circumstances. IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. There are two types of IEPR:

- **Type I IEPR.** Type I IEPR reviews are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all underlying engineering, economics, and environmental work, not just one aspect of the study. For decision documents where a Type II

IEPR (Safety Assurance Review) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-209.

- Type II IEPR. Type II IEPR, or Safety Assurance Review (SAR), are managed outside the USACE and are conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.
- a. **Decision on IEPR.** The District has reviewed the requirements for IEPR and determined that a Type I IEPR will be required. As noted in Paragraph Appendix D of EC 1165-2-209, Type I is required for all projects where there is a significant threat to human life; the estimated total project cost is greater than \$45 million; the governor of an affected state requests the review; the head of a Federal or state agency determines that the project is likely to have significant adverse impacts; there is significant public dispute as to the size, nature, or effects of the project; there is significant public dispute as to the economic or environmental costs or benefits; information is based on novel or precedent-setting methods or presents complex challenges for interpretation; or the Chief of Engineers determines that this review is warranted.
- The project is not likely to involve significant threat to human life and safety. Retained management measures will be consistent with sound engineering practices and environmental standards.
 - Preliminary estimates indicate that the cost of the selected plan will be at or near \$45 million. This estimated cost triggers the requirement for an IEPR review.
 - This project is not likely to have significant economic, environmental, or social effects. Development of a DMMP will provide for maintenance of current conditions at Calumet Harbor and River.
 - This project is not likely to have significant interagency interest. Dredging operations at Calumet Harbor are performed by the USACE.
 - The project is not expected to be controversial. While this project will require thoughtful discussion with and input from stakeholders already familiar with the navigation mission of the Corps, the DMMP will provide for the continued maintenance of an existing federal channel. Dredging and management of dredged material are not new to the project.
 - This project is not likely to contain influential scientific information. Due to site-specific sediment composition and contaminant levels, management measures developed at Calumet Harbor will be unique to site conditions.

None of the measures under consideration will pose a significant threat to human life. Therefore, it is not anticipated that a Type II IEPR will be required.

- b. **Products to Undergo Type I IEPR.** IEPR will be conducted for the draft DMMP Report and EA after the Alternative Formulation Briefing.

c. Required Type I IEPR Panel Expertise.

IEPR Panel Members/Disciplines	Expertise Required
Economics	Team member will have a strong understanding of economic models and studies related to inland navigation.
Environmental	Team member will be an expert in the area of NEPA compliance.
Environmental Engineer	Team member will be an expert in the field of environmental engineering and have a thorough understanding of issues related to sediment quality, treatment technologies, disposal methods, and beneficial use applications.
Cost Engineer/Civil Design	Team member will have a strong knowledge of cost estimating practices for construction projects and civil design procedures .

d. Documentation of Type I IEPR. The IEPR panel will be selected and managed by an Outside Eligible Organization (OEO) per EC 1165-2-209, Appendix D. Panel comments will be compiled by the OEO and should address the adequacy and acceptability of the economic, engineering and environmental methods, models, and analyses used. IEPR comments should generally include the same four key parts as described for ATR comments in Section 4.d above. The OEO will prepare a final Review Report that will accompany the publication of the final decision document and shall:

- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions; and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

The final Review Report will be submitted by the OEO no later than 60 days following the close of the public comment period for the draft decision document. USACE shall consider all recommendations contained in the Review Report and prepare a written response for all recommendations adopted or not adopted. The final decision document will summarize the Review Report and USACE response. The Review Report and USACE response will be made available to the public, including through electronic means on the internet.

7. POLICY AND LEGAL COMPLIANCE REVIEW

All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents.

8. COST ENGINEERING DIRECTORY OF EXPERTISE (DX) REVIEW AND CERTIFICATION

All decision documents shall be coordinated with the Cost Engineering DX, located in the Walla Walla District. The DX will assist in determining the expertise needed on the ATR team and Type I IEPR team (if required) and in the development of the review charge(s). The DX will also provide the Cost Engineering DX certification. The RMO is responsible for coordination with the Cost Engineering DX.

9. MODEL CERTIFICATION AND APPROVAL

EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models, for the purposes of the EC, are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, to formulate potential alternatives to address the problems and take advantage of the opportunities, to evaluate potential effects of alternatives and to support decision making. The use of a certified/approved planning model does not constitute technical review of the planning product. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE developed and commercial engineering software will continue and the professional practice of documenting the application of the software and modeling results will be followed. As part of the USACE Scientific and Engineering Technology (SET) Initiative, many engineering models have been identified as preferred or acceptable for use on Corps studies and these models should be used whenever appropriate. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required).

a. Planning Models. The following planning models are anticipated to be used in the development of the decision document:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Certification / Approval Status
Great Lakes Systems Analysis of Navigation Depths (GL-SAND)	The (GL-SAND) model will be used in the calculation of benefits for the project. GL-SAND, developed in conjunction with PCX-IN, is a regional model developed to measure navigation project performance in the Great Lakes. The model assesses economic benefits of maintaining harbor channels based on transportation cost differences using current harbor shipping data. Information incorporated into the analysis includes shoaling rates, variable lake levels, vessel characteristics, vessel costs, and the depths of harbors, locks and connecting channels. Cost savings are determined by simulating shipping costs associated with the shipping costs associated with the most recent yearly waterborne shipments at varying hypothetical constrained port channel depths. The program will be used in the calculation of benefits of continued harbor maintenance. GL-SAND is currently being reviewed for approval by PCX-IN, as discussed below in Section 10.c	Under Review

- a. **Engineering Models.** The following engineering models are anticipated to be used in the development of the decision document:

Model Name and Version	Brief Description of the Model and How It Will Be Applied in the Study	Approval Status
LTFATE SEDZLJ	LTFATE is a three-dimensional hydrodynamic and sediment transport model. The hydrodynamic part of LTFATE is the ERDC CH3D model. For this application, LTFATE will be applied in a two-dimensional mode. The sediment transport component of LTFATE is the SEDZLJ model. SEDZLJ is a two- or three-dimensional, multiple sediment class transport model. For this application, a two-dimensional sediment transport model will be used. SEDZLJ includes a three-dimensional representation of the sediment bed. As many as four sediment management scenarios will be modeled as part of this study. This model will be used to evaluate measures for reducing sedimentation in the Federal channel.	ERDC Preferred Model

10. REVIEW SCHEDULES AND COSTS

- a. **ATR Schedule and Cost.** The DMMP study will undergo the ATR reviews listed below. The listed dates are preliminary and may be adjusted as the study progresses.

- ATR Review of Feasibility Scoping Meeting Documents October 2010
- Feasibility Scoping Meeting May 2011
- ATR Review of Alternative Formulation Briefing Documents May 2013
- Alternative Formulation Briefing September 2013
- ATR Review of Draft DMMP January 2014
- IEPR Review of Draft DMMP March 2014
- DMMP Review Conference September 2014
- Draft Final Report to CELRD and HQUACE October 2014

The estimated cost for ATR Review of this study is \$25,000.

- b. **Type I IEPR Schedule and Cost.** The DMMP will undergo IEPR Review according to the schedule below. The listed dates are preliminary and may be adjusted as the study progresses.

- IEPR Review of Draft DMMP March 2014
- Draft Final Report to CELRD and HQUACE October 2014

The estimated cost for IEPR Review of this study is \$125,000.

- c. **Model Certification/Approval Schedule and Cost.** Review and approval of GL-SAND by PCX-IN is being coordinated among the Great Lakes Districts that will be using the model in regional DMMPs. The estimated cost for certification of the model is \$28,000. LRC has contributed \$14,000 to the cost of the review.

11. PUBLIC PARTICIPATION

In addition to formal Public Scoping, public involvement in the DMMP Study will be solicited through a public meeting and a public comment period. A meeting will be held once the Draft DMMP Report has been developed. Additionally, a public comment period will be established to allow for input prior to the completion of the Final DMMP Report. A preliminary schedule is below.

- | | |
|-------------------------------|------------|
| ▪ Public Scoping | March 2010 |
| ▪ Public Meeting(if required) | March 2014 |
| ▪ Public Comment Period | March 2014 |

Comments received as part of Public Scoping and the follow-on Public Review will be provided to ATR reviewers as part of the documentation being reviewed for the FSM and the AFB, as appropriate. These responses will also be included in the draft report submitted for IEPR review. Documentation of the public meetings and responses received during the public comment period will be included in the draft final report.

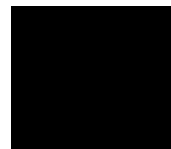
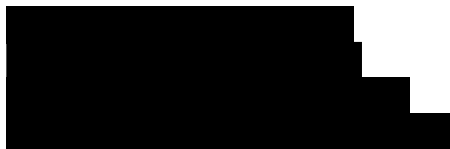
12. REVIEW PLAN APPROVAL AND UPDATES

The Great Lakes and Ohio River Division Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving district, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, the Review Plan is a living document and may change as the study progresses. The home district is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC Commander approval are documented in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should be re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders' approval memorandum, should be posted on the Home District's webpage. The latest Review Plan should also be provided to the RMO and home MSC.

13. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this review plan can be directed to the following points of contact:

- CELRC
- CELRC
- CELRD
- PCX-IN



ATTACHMENT 1: TEAM ROSTERS

A. Project Delivery Team

Name	Discipline/Org.	Phone	E-mail
[REDACTED]	Economist CELRC-PM-PL-F	[REDACTED]	[REDACTED]
[REDACTED]	Cost Engineer CELRC-TS-DC	[REDACTED]	[REDACTED]
[REDACTED]	Plan Formulation CELRC-PM-PL-F	[REDACTED]	[REDACTED]
[REDACTED]	NEPA Compliance CELRC-PM-PL-E	[REDACTED]	[REDACTED]
[REDACTED]	Surveying CELRC-TS-DG	[REDACTED]	[REDACTED]
[REDACTED]	Geotechnical Engineer CELRC-TS-DG	[REDACTED]	[REDACTED]
[REDACTED]	Operations CELRC-TS-C-T	[REDACTED]	[REDACTED]
[REDACTED]	Hydraulic Engineer CELRC-TS-DH	[REDACTED]	[REDACTED]
[REDACTED]	Project Manager CELRC-PM-PM	[REDACTED]	[REDACTED]
[REDACTED]	Civil Designer CELRC-TS-DC	[REDACTED]	[REDACTED]
[REDACTED]	Real Estate CELRE-RE	[REDACTED]	[REDACTED]
[REDACTED]	Environmental Engineer CELRC-TS-DH	[REDACTED]	[REDACTED]

B. ATR Team

Name	Discipline/Org.	Phone	E-mail
[REDACTED]	ATR Team Leader CESAJ-PD-D	[REDACTED]	[REDACTED]
[REDACTED]	Plan Formulation CELRB-PM-PB	[REDACTED]	[REDACTED]
[REDACTED]	Economist CELRB-PM-PB	[REDACTED]	[REDACTED]
[REDACTED]	Environmental Engineer CELRE-PL-E	[REDACTED]	[REDACTED]
[REDACTED]	Cost Eng./Civil Design CELRB-TD-DE	[REDACTED]	[REDACTED]
[REDACTED]	Geotechnical Engineer CELRB-TD-DC	[REDACTED]	[REDACTED]
[REDACTED]	Operations CELRE-RG-A	[REDACTED]	[REDACTED]

C. Vertical Team

Name	Title/Organization	Phone	E-mail
[REDACTED]	Chief, Planning Branch CELRC-PM-PL	[REDACTED]	[REDACTED]
[REDACTED]	Deputy for Proj. Mgmt. CELRC-PM	[REDACTED]	[REDACTED]
[REDACTED]	Chief Planning & Policy LRD-PDS-P	[REDACTED]	[REDACTED]
[REDACTED]	RIT Manager CECW-LRD	[REDACTED]	[REDACTED]

D. Independent Expternal Peer Review Team

Name	Title/Organization	Phone	E-mail
TBD	Economist	TBD	TBD
TBD	Environmental Engineer	TBD	TBD
TBD	Cost Eng./Civil Design	TBD	TBD
TBD	Geotechnical Engineer	TBD	TBD
TBD	Operations	TBD	TBD

E. Planning Center of Expertise Point of Contact

Name	Title/Organization	Phone	E-mail
[REDACTED]	Co-Technical Director PCXIN	[REDACTED]	[REDACTED]

ATTACHMENT 2: SAMPLE STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Dredged Material Management Plan for Calumet Harbor and River, Illinois and Indiana. The ATR was conducted as defined in the project’s Review Plan to comply with the requirements of EC 1165-2-209. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer’s needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

SIGNATURE

Name
ATR Team Leader
Office Symbol/Company _____ Date

SIGNATURE

Name
Project Manager
Office Symbol _____ Date

SIGNATURE

Name
Architect Engineer Project Manager¹
Company, location _____ Date

SIGNATURE

Name
Review Management Office Representative
Office Symbol _____ Date

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: Describe the major technical concerns and their resolution.

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

SIGNATURE

Name
Chief, Engineering Division
Office Symbol _____ Date

SIGNATURE

Name
Chief, Planning Division
Office Symbol _____ Date

¹ Only needed if some portion of the ATR was contracted

ATTACHMENT 3: REVIEW PLAN REVISIONS

Revision Date	Description of Change	Page / Paragraph Number

ATTACHMENT 4: ACRONYMS AND ABBREVIATIONS

<u>Term</u>	<u>Definition</u>	<u>Term</u>	<u>Definition</u>
AFB	Alternative Formulation Briefing	O&M	Operation and maintenance
ATR	Agency Technical Review	OMB	Office and Management and Budget
CDF	Confined Disposal Facility	OMRR&R	Operation, Maintenance, Repair, Replacement and Rehabilitation
CELRC	USACE Chicago District	OEO	Outside Eligible Organization
CELRD	USACE Great Lakes and Ohio River Division	OSE	Other Social Effects
DMMP	Dredged Material Management Plan	PCX	Planning Center of Expertise
		PCX-IN	Inland Navigation Center of Expertise
DQC	District Quality Control/Quality Assurance		
DX	Directory of Expertise	PDT	Project Delivery Team
EA	Environmental Assessment	PMP	Project Management Plan
EC	Engineer Circular	PL	Public Law
EIS	Environmental Impact Statement	QMP	Quality Management Plan
EO	Executive Order	QA	Quality Assurance
ER	Engineer Regulation	QC	Quality Control
FSM	Feasibility Scoping Meeting	RED	Regional Economic Development
Home District/MSD	The District or MSD responsible for the preparation of the decision document	RMC	Risk Management Center
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMO	Review Management Organization
IEPR	Independent External Peer Review	RTS	Regional Technical Specialist
ILGD	International Great Lakes Datum	SAR	Safety Assurance Review
MSC	Major Subordinate Command	SOW	Scope of Work
NED	National Economic Development	USACE	U.S. Army Corps of Engineers
NEPA	National Environmental Policy Act	WRDA	Water Resources Development Act