

**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE UNITED STATES ARMY CORPS OF ENGINEERS,  
CHICAGO DISTRICT,  
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,  
REGION 5,  
THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
AND  
THE EAST CHICAGO WATERWAY MANAGEMENT DISTRICT**

This Agreement is entered into this 25<sup>th</sup> day of May, 2001, by and between the **DEPARTMENT OF THE ARMY** represented by the U.S. Army Engineer for the Chicago District (hereinafter the "Corps") and the **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 5** (hereinafter referred to as the "EPA"), represented by the Regional Administrator, the **INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT** (hereinafter referred to as "IDEM"), represented by the Commissioner and the **EAST CHICAGO WATERWAY MANAGEMENT DISTRICT** (hereinafter referred to as the "District"), represented by the President of its Board.

**Witnesseth That:**

**WHEREAS**, over the past eighteen years, shoaling and siltation has significantly reduced channel depths in the Indiana Harbor and Ship Canal (hereinafter referred to as the "IHC"), located in East Chicago Indiana, and created a serious navigational hazard. In addition, these sediments and the sediments of the Grand Calumet River have become saturated with contaminants from industrial and municipal sources and threaten the water quality of southern Lake Michigan; and,

**WHEREAS**, the proposed maintenance dredging of the IHC and subsequent construction of a Confined Disposal Facility (hereinafter referred to as the "CDF") has been authorized by the Rivers and Harbor Acts of June 15, 1910, March 20, 1922, March 2, 1929, July 3, 1930, August 30, 1935, August 28, 1937 and July 14, 1960 and October 27, 1965; and,

**WHEREAS**, the site of the proposed CDF, a portion of the ECI Refinery Site (hereinafter referred to as the "facility") located at 3500 Indianapolis Boulevard, East Chicago, Indiana, on the Lake George branch of the Indiana Harbor Ship Canal, as identified in Exhibit "A", is the most cost effective plan, consistent with sound engineering practices and meeting the environmental standards established by the Section 404 (b)(1), Public Law 92-500 evaluation process, available for construction of a CDF; and,

**WHEREAS**, the CDF site is subject to regulation by the EPA and IDEM under the authority of the following:

- a. The National Environmental Policy Act (hereinafter referred to as "NEPA"), 12 U.S.C. Section 4321, et seq.,
- b. The Resource Conservation and Recovery Act (hereinafter referred to as "RCRA"), 42 U.S.C. 6901, et seq.,
- c. Indiana Code, Title 13, Environment,
- d. The Toxic Substance Control Act (hereinafter referred to as "TSCA"), 15 U.S.C. 2601, et seq.,
- e. The Clean Water Act (hereinafter referred to as "CWA"), 33 U.S.C. 121, et seq., and
- f. The Clean Air Act (hereinafter referred to as "CAA"), 42 U.S.C. 7401, et seq.
- g. The Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601, et seq. (hereinafter referred to as "CERCLA"); and,

**WHEREAS**, the purpose of this Memorandum of Understanding (hereinafter referred to as the "Agreement") is to define the roles and responsibilities of the Corps, the EPA, IDEM, and the District (hereinafter collectively referred to as the "Parties") to facilitate the completion of the RCRA and TSCA mandated work associated with the construction, utilization and closure of the CDF and TSCA cell (hereinafter referred to as the "CDF Work") as further defined in part "A.1." of this Agreement in a manner consistent with the statutory and regulatory responsibilities of the Parties and the regulations for restricted waste landfills of the State of Indiana (hereinafter referred to as the "State"); and,

**WHEREAS**, EPA has the statutory authority to enforce the regulatory requirements of CERCLA, TSCA, RCRA; and,

**WHEREAS**, EPA, while retaining oversight, has delegated certain regulatory authorities of the CAA, CWA, and RCRA to IDEM; and,

**WHEREAS**, the Corps is authorized to construct the project according to the National Economic Development Plan as set forth in the Indiana Harbor and Canal Maintenance Dredging and Disposal Activities, Comprehensive Management Plan, dated January, 1999, (hereinafter referred to as the "CMP"), subject to meeting Federal regulatory requirements; and,

**WHEREAS**, the District and the Corps have entered into a Project Cooperation Agreement dated August 7, 2000, (hereinafter referred to as the "PCA") which requires the District to be responsible for any non-Federal regulatory requirements that exceed the Federal regulatory requirements; and,

**WHEREAS**, EPA has determined that RCRA corrective action applies to the facility and IDEM has determined that RCRA closure requirements apply to the area that previously housed the hazardous waste units; and,

**WHEREAS**, EPA has determined that the construction of the CDF, as outlined in the CMP will address the corrective action requirements for the underlying portions of the facility; and,

**WHEREAS**, the post closure care requirements under RCRA have been incorporated into the maintenance and monitoring requirements for the CDF as further described in the CMP; and,

**WHEREAS**, this Agreement will provide an overall legal and technical framework for the Parties to follow in order to complete the CDF Work associated with the Indiana Harbor Canal Dredging and Disposal Activities (hereinafter referred to as the "Project") in an expeditious manner consistent with the regulatory authorities of the EPA and IDEM; and,

**WHEREAS**, the CDF Work associated with the Project shall be designed and constructed to meet 1) all RCRA closure, post-closure requirements, and corrective action requirements; 2) TSCA regulatory requirements for closure and post-closure care for sediments containing PCBs in concentrations of 50 parts per million or greater; and 3) regulatory requirements, including TSCA requirements, for the disposal of sediments containing PCBs in concentrations of 2-49 ppm, which are considered special wastes, and will take many years to complete; and,

**WHEREAS**, the Parties recognize that this Agreement is intended to identify currently applicable Federal and State legal requirements in order to provide a foundation on which the Parties can proceed according to those requirements that are currently applicable to the CDF Work, as further described in the Design Documentation Reports (hereinafter referred to as "DDR"), and that the legal and technical standards regarding closure and post-closure procedures associated with the CDF Work may change over the course of the Project and that closure of the CDF must satisfy closure, post-closure, and corrective action requirements in accordance with the technical and legal requirements, applicable to hazardous waste, hazardous waste constituents, and hazardous constituents that may be in place at the time of closure and post-closure of the area; and,

WHEREAS, the Parties recognize that the overall public interest is served by working in a cooperative manner within the framework of the Parties' statutory and regulatory authorities and responsibilities.

NOW, THEREFORE, the Parties agree as follows:

**A. Definitions:**

Unless otherwise expressly provided herein, terms used in this Agreement, which are defined in RCRA or TSCA or in regulations promulgated under RCRA or TSCA shall have the definitions given to them in RCRA or TSCA or in such regulations promulgated therefrom by either EPA or IDEM and shall not be used or construed to replace or supplant the definitions used in any other agreement in place between any of the Parties.

1. "CDF Work" shall mean the design, construction, implementation and finalization of the measures as further described on pages 114 and 115 of the CMP as are covered by State and Federal law within the purview of the EPA/IDEM.
2. "Comply or Compliance" may be used interchangeably and shall mean completion of the CDF Work that is protective of human health and the environment and is of a quality, agreed upon in the permit process, as further discussed in this Agreement, which IDEM or EPA has/or can approve in the manner and time specified in this Agreement or any modification thereof, its attachments or any modification thereof, or written directives of IDEM or EPA. The District and the Corps must meet both the quality and timeliness components of a particular requirement to be considered in compliance with the terms and conditions of this Agreement.
3. "Submittal" shall include any work plan, report, diagram, progress report or design documentation report, or any other written document required for submission to IDEM/EPA under this Agreement.
4. "Hazardous Waste Units" shall mean, for purposes of this Agreement, RCRA unit areas I, IIA, and IIB as further described in the CMP, page 66.

**B. Conclusions of Law and Determinations:**

Based on the background and objectives set forth in this Agreement and after consideration of the documentation contained in the public file, the Parties agree that the following conclusions of law and determinations are applicable to the CDF Work as it relates to work to be performed as generally described in the CMP.

1. The District is the owner of the CDF and site as defined by 40 C.F.R § 260.10.
2. The Corps is the operator of the CDF and site as defined by 40 C.F.R. § 260.10.
3. The Parties agree and acknowledge that the site of the CDF Work does contain contaminants, hazardous wastes, hazardous waste constituents, or hazardous constituents regulated by RCRA and/or TSCA.
4. The Parties agree and acknowledge that the CDF Site is subject to RCRA closure and corrective action requirements, as set forth in State and Federal Statutes.
5. The Parties agree and acknowledge that the following are potential permits and approvals that will be required for this Project: 401 Water Quality Certification, Facility Construction Permit, Storm Water/NPDES Permit, Air Permit, TSCA risk-based disposal approval and Hazardous Waste Management Operating Permit.

**C. Responsibilities/Duties of the Parties:**

1. The District's/Corp's Joint Responsibilities:
  - a. All CDF work shall be performed in a manner consistent with all applicable statutes and regulations relating to closure, post-closure, and corrective action requirements, activities and responsibilities and shall be consistent with the plan described in the CMP. The CDF Work, as described in the CMP and DDRs, as described in Exhibit "B" and further developed in future DDRs, shall meet the requirements contained in the Closure and Post-Closure Plan.
  - b. All CDF Work performed by the District and/or the Corps shall be under the direction and supervision of a registered Professional Engineer or certified Professional Geologist with expertise in hazardous waste site cleanup. Within thirty (30) calendar days of the effective date of this Agreement, the District and/or the Corps shall notify the other Parties in writing of the name, title, and qualifications of the engineer or geologist, and of any contractors or subcontractors and their personnel to be used in carrying out the terms of this Agreement.
  - c. The District and/or the Corps shall, to the extent possible, comply with changes to, or deviations from, the plans for the CDF Work as outlined in the CMP as requested by either IDEM or EPA that are required

due to changes in the law or regulation from that in place at the time this Agreement becomes effective.

d. The District and/or the Corps shall ensure that both IDEM and EPA shall receive copies of all Submittals.

e. Within thirty (30) calendar days of the effective date of this Agreement, both the District and the Corps shall each appoint a Project Coordinator who shall have over-all responsibility for their agency's implementation of this Agreement. Each Party shall notify the other Parties of the respective coordinator's name and phone number. In the event that either Party must replace a Project Coordinator or Technical Coordinator, the replacing Party shall notify the other Parties of the change and furnish the new coordinator's name and phone number.

f. Upon notification of IDEM's or EPA's approval of any report submitted by either the Corps or District relating to a permit issued by either IDEM or EPA, the Corps and the District agree to implement the report as approved by either IDEM or EPA.

2. The District's Responsibilities/Duties:

a. Expeditiously apply for all permits required by either IDEM or the EPA for completion of the Project.

b. Expeditiously reply to any comments from either the public or IDEM/EPA relating to all permits required for completion of the Project.

c. Expeditiously respond to IDEM/EPA relating to project permit related questions.

3. The Corps's Responsibilities/Duties:

a. The Corps will coordinate permit applications with the District and assist them in applying for and securing any permits required for the Project, including, assisting the District in responding to any comments relating to any such permit.

b. The Corps, will expeditiously respond to any public comments relating to any Project related permit to be issued by the respective agency.

4. The Joint IDEM/EPA Responsibilities/Duties:

a. IDEM/EPA will process any permit, approval or certification,

except those required under RCRA or TSCA, required for this Project under its statutory or regulatory authority as expeditiously as possible.

b. IDEM/EPA will review all draft or final reports prepared by the Corps or the District relating to any permit to be issued under the agency's authority and shall notify the Corps or the District in writing of its approval or disapproval of the report or any part thereof.

c. IDEM/EPA shall offer oversight and review of all recurring duties required by law for the Project.

d. Within thirty (30) calendar days of the effective date of this Agreement, IDEM and EPA shall notify the other Parties of the name and phone number of its Project Coordinator who shall have over-all responsibility for implementation this Agreement. In the event that either Party must replace a Project Coordinator, the replacing Party shall notify the other Parties of the change and furnish the new coordinator's name and phone number.

5. IDEM Responsibilities/Duties:

a. IDEM agrees to function as the lead agency for all oversight related to the CDF Work that falls under the jurisdiction provided by RCRA, Subtitle D, Special Waste provisions, the CWA, and the CAA.

b. IDEM shall process and administer all permits and all one-time permit approvals required by RCRA Subtitle C, the CWA and the CAA.

6. The EPA Responsibilities/Duties:

a. EPA agrees to function as the lead agency for all oversight related to the CDF Work that falls under the jurisdiction provided by TSCA and those parts of RCRA not delegated to the state.

b. EPA shall process and administer all permits and all one-time permit approvals required by TSCA.

**D. Severability:**

If any provision or authority of this Agreement or the application of this Agreement to any Party or circumstances is held by any judicial or administrative authority to be invalid, the application of such provisions to other Parties or circumstances and the remainder of the Agreement shall remain in force and shall not be affected thereby.

**E. Termination and Satisfaction:**

The provisions of this Agreement shall be deemed satisfied upon IDEM's approval of all RCRA closure, post-closure and corrective action requirements, at the facility and EPA's approval of all TSCA activities. This Agreement may be terminated upon any Party providing sixty (60) days written notice to all of the other Parties that they desire to terminate this Agreement.

**F. Effective Date and Duration:**

This Agreement becomes effective upon execution by the last Party. All signatories to this Memorandum hereby certify that they are authorized to enter into this Agreement to legally bind the Parties that they represent. Once the Agreement becomes effective, it shall remain in effect until the CDF Work has been completed or upon any Party providing sixty (60) day written notice to all of the other Parties that they desire to terminate this Agreement.

**G. Additional Responsibilities and Funding:**

This Agreement is not intended to impose any responsibilities or obligations inconsistent with the individual Party's statutory or regulatory responsibilities. Furthermore, any responsibility or obligation of the Corps pursuant to this Agreement is explicitly subject to the availability of funds appropriated by Congress.

**H. Dispute Resolution:**

In the event of a dispute involving any decisions under this Agreement, not covered by a regulatory program appeals procedure or the dispute resolution terms of the PCA, the parties shall initially attempt to resolve the dispute through good faith discussions, by the Corps' Project Manager, the Project Coordinators of EPA and IDEM, and/or the Executive Director of the District, directed toward obtaining consensus. If after good faith discussions, a consensus cannot be reached, any party may initiate dispute resolution by sending written notice to the other Parties. The matter shall be elevated to the next management level for decision or further instructions. If necessary, the managers/supervisors, by mutual consent, may establish other mechanisms by which disputes may be resolved including further redress, if necessary, to other management levels with final decision making authority vested in the signatories to this agreement.



IN WITNESS WHEREOF, the Parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the last signatory.

UNITED STATES ARMY CORPS OF ENGINEERS, CHICAGO DISTRICT,

By: Mark A. Roncoli Date: 25 May 01  
Mark A. Roncoli  
Colonel, U.S. Army  
District Engineer

Attest: Joseph A. Salom

**IN WITNESS WHEREOF**, the Parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the last signatory.

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 5

By: David A. Ullrich Date: May 18, 2001  
David A. Ullrich  
Acting Regional Administrator

Attest: [Signature]  
[Signature]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement, which shall become effective upon the date it is signed by the last signatory.

THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

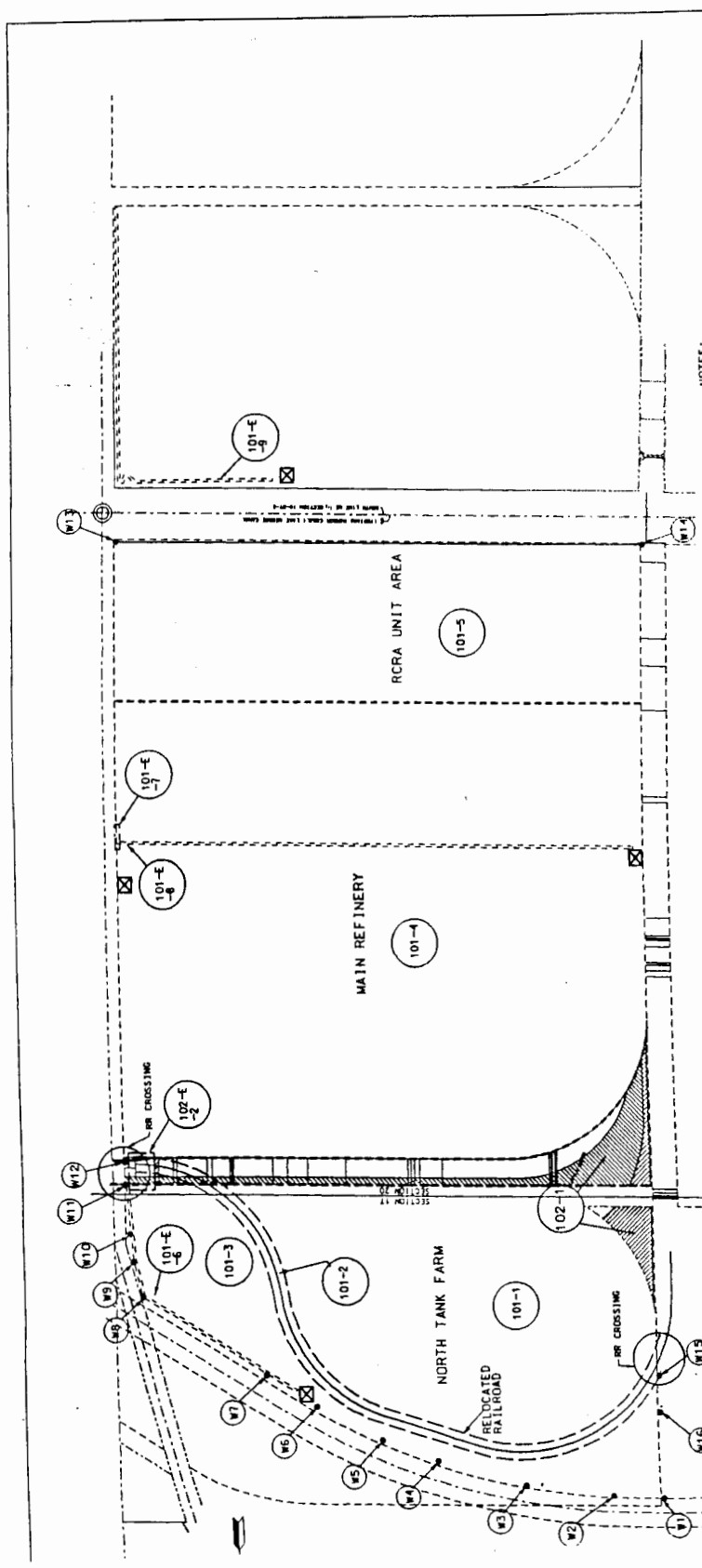
By: Lori F. Kaplan Date: 2-1-01  
Lori F. Kaplan  
Commissioner

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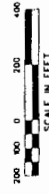
THE EAST CHICAGO WATERWAY MANAGEMENT DISTRICT

By: Rose Parker Date: 2/27/01  
Rose Parker  
President, Board of Directors  
East Chicago Waterway Management District

Attest: Ehud M. [Signature]



NOTES:  
 1. All monitoring sampler locations are shown in this map. Locations are subject to change. Special provisions for 101-E-1 and 101-E-2 are shown in the notes.



REAL ESTATE MAP

AS SHOWN DECEMBER 1995 PLATE A1-006

| PERMANENT EASEMENT NUMBER | NORTHING    | EASTING   |
|---------------------------|-------------|-----------|
| W1                        | 1-514-457.0 | 389-213.8 |
| W2                        | 1-514-453.8 | 389-413.8 |
| W3                        | 1-514-404.2 | 389-728.6 |
| W4                        | 1-514-301.0 | 390-103.2 |
| W5                        | 1-514-215.8 | 390-322.0 |
| W6                        | 1-513-987.5 | 390-773.5 |
| W7                        | 1-513-643.1 | 391-256.2 |
| W8                        | 1-513-306.5 | 391-280.7 |
| W9                        | 1-513-398.2 | 391-280.5 |
| W10                       | 1-513-207.8 | 391-315.3 |
| W11                       | 1-513-123.8 | 391-314.8 |
| W12                       | 1-510-731.1 | 391-304.9 |
| W13                       | 1-510-767.3 | 389-197.4 |
| W14                       | 1-513-986.8 | 389-214.4 |
| W15                       | 1-514-128.9 | 389-214.4 |
| W16                       | 1-514-128.9 | 389-214.4 |

| TRACT   | LAND OWNER            | ACRES | REMARKS        |
|---------|-----------------------|-------|----------------|
| 101-1   | East Chicago Refinery | 24.78 | PERM. EASEMENT |
| 101-2   | East Chicago Refinery | 2.44  | PERM. EASEMENT |
| 101-3   | East Chicago Refinery | 12.04 | PERM. EASEMENT |
| 101-4   | East Chicago Refinery | 82.45 | PERM. EASEMENT |
| 101-5   | East Chicago Refinery | 30.05 | PERM. EASEMENT |
| 101-E-1 | East Chicago Refinery | 0.74  | PERM. EASEMENT |
| 101-E-2 | East Chicago Refinery | 0.09  | PERM. EASEMENT |
| 101-E-3 | East Chicago Refinery | 0.47  | PERM. EASEMENT |
| 101-E-4 | East Chicago Refinery | 0.34  | PERM. EASEMENT |
| 102-E-1 | East Chicago Refinery | 4.33  | PERM. EASEMENT |
| 102-E-2 | East Chicago Refinery | 0.32  | PERM. EASEMENT |

STATE LEGEND

- PERMANENT RE INTERESTS
- - - CANAL CENTERLINE
- ... ROAD CENTERLINE
- PROPERTY BOUNDARY
- AIR MONITORING SAMPLER LOCATION