



THE SECRETARY OF TRANSPORTATION
WASHINGTON, DC 20540

JUL 6 1994

The Honorable Thomas S. Foley
Speaker of the House of Representatives
Washington, DC 20515

Dear Mr. Speaker:

Enclosed is the Department of Transportation's biennial report of the Interagency Coordinating Committee on Oil Pollution Research. The report, as required by Title VII of the 1990 Oil Pollution Act (OPA), describes Oil Pollution Research and Technology Plan activities carried out during fiscal years (FY) 1992 and 1993, and activities proposed to be carried out in the next two FY periods.

The Interagency Coordinating Committee is continuing to revise the Oil Pollution Research and Technology Plan, which covers activities planned through FY 1997, and will publish the revised plan later this year.

An identical letter has been sent to the President of the Senate.

Sincerely,

A handwritten signature in black ink, appearing to read 'Federico Peña', written in a cursive style.

Federico Peña

Enclosure

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THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

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JUL 6 1994

The Honorable Albert Gore, Jr.
President of the Senate
Washington, DC 20515

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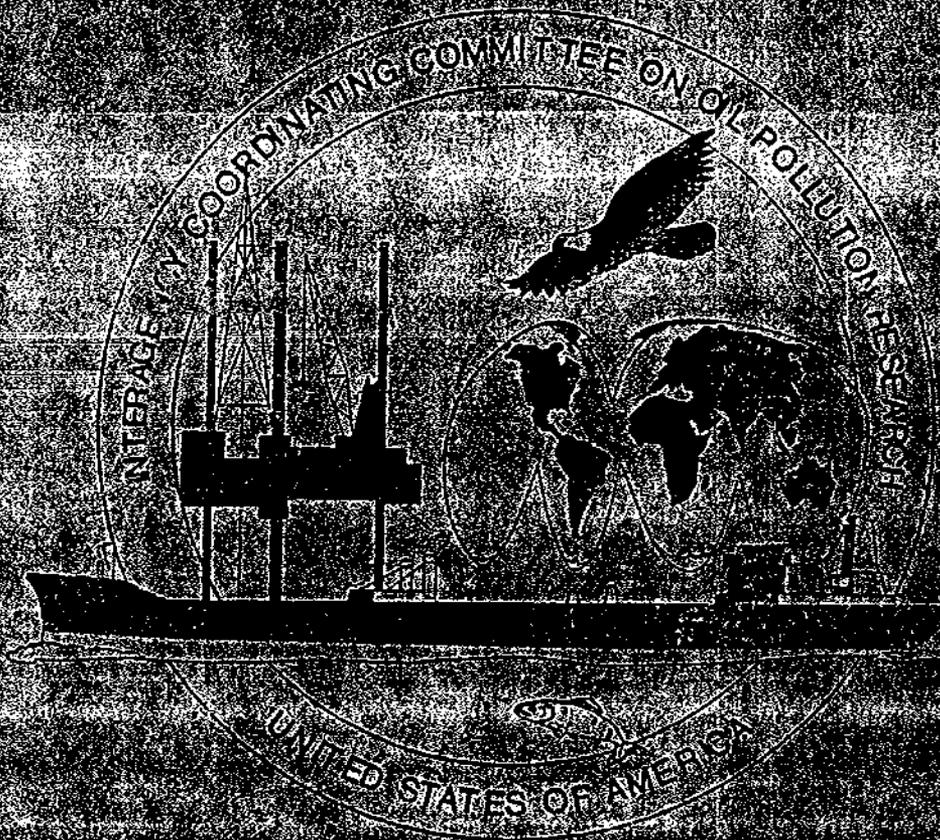
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Sincerely,

Federico Peña

Enclosure

**Interagency Coordinating Committee
on Oil Pollution Research**



Biennial Report to Congress

OCTOBER 1993

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1. Introduction.

1.1 Purpose of Report.

Section 7001(e) of the Oil Pollution Act of 1990 (OPA 90) requires that the Chairman of the Interagency Coordinating Committee on Oil Pollution Research submit a Biennial Report to Congress every two years on October 30. The Biennial Report must describe activities carried out under Title VII of OPA 90 in the preceding two fiscal years and activities proposed to be carried out in the current two fiscal year period.

Submission of the first Biennial Report was delayed in order to include the Interagency Committee responses to recommendations contained in the interim report of the National Research Council/Marine Board (NRC/MB) Committee on Oil Spill Research and Development (R&D). Section 7001(b)(2)(B) of OPA 90 required the Chairman of the Interagency Committee to contract with the NRC/MB to assess the adequacy of the Oil Pollution Research and Technology Plan submitted by the Interagency Committee to Congress on April 24, 1992.

1.2 Organization of Report.

This report begins with background on the Interagency Committee including its purpose, membership, organization, and programs. Subsequent sections describe accomplishments of the Interagency Committee during its first two years and planned activities for the next two years. The concluding sections address OPA 90 funding issues and Interagency Committee responses to recommendations contained in the interim report of the NRC/MB Committee on Oil Spill R&D. The publications of the Interagency Committee are attachments.

2. Background.

2.1 History of Interagency Committee.

The purposes of the Interagency Committee are described at Section 7001(a)(2) in Title VII of OPA 90. These purposes are twofold: (1) prepare a comprehensive, coordinated federal oil pollution R&D plan; and (2) promote cooperation with industry, universities, research institutions, State governments, and other nations through information

sharing, coordinated planning and joint funding of projects.

The membership of the Interagency Committee is specified by Title VII of OPA 90 and includes: the National Oceanic and Atmospheric Administration (NOAA), National Institute of Standards and Technology (NIST), Department of Energy (DOE), Minerals Management Service (MMS), U. S. Fish and Wildlife Service (USFWS), U. S. Coast Guard (USCG), Maritime Administration (MARAD), Research and Special Programs Administration (RSPA), U. S. Army Corps of Engineers (USACE), U. S. Navy (USN), Environmental Protection Agency (EPA), National Aeronautics and Space Administration (NASA), and the U. S. Fire Administration (USFA). The President signed an Executive Order delegating authority to the Secretary of the Department of Transportation to name additional members.

2.2 Organization of the Interagency Committee.

The Chairman of the Interagency Committee is a representative of the Department of Transportation (DOT) as required by Section 7001(a)(3). The Secretary of Transportation named the U. S. Coast Guard to chair the Interagency Committee. The Commandant of the U. S. Coast Guard appointed Mr. Daniel F. Sheehan as the first Chairman. Subsequently, Mr. Sheehan was named as the Director of the new National Pollution Funds Center (NPFC) and the Commandant named Mr. Joseph J. Angelo as his replacement. Mr. Angelo is the Associate Program Director in the Office of Marine Safety, Security and Environmental Protection at U. S. Coast Guard Headquarters in Washington, D.C.

A member of the Technical Advisory Staff in the Office of Marine Safety, Security and Environmental Protection at U. S. Coast Guard Headquarters in Washington, D.C. is assigned to serve as the Executive Director of the Interagency Committee.

There are seven subcommittees established by the Charter of the Interagency Committee with responsibility for categories of oil pollution R&D or special programs. The R&D subcommittees are: Spill Prevention; Spill Response Planning and Management; Spill Response; and Effects and Restoration. Other subcommittees include: Grants; State, Industry and International Coordination; and Port Demonstration Projects (ad hoc subcommittee).

2.3 Interagency Committee Programs.

The Interagency Committee is required to implement three programs described in Title VII of OPA 90. Sections 7001(c)(9) and 7001(f), as amended, authorize \$28,000,000 annually to be appropriated from the Oil Spill Liability Trust Fund (OSLTF) to pay for these programs. The three programs are: (1) additional federal oil pollution R&D contained in the Interagency Committee's Oil Pollution Research and Technology Plan (\$19,000,000 per year); (2) a Regional Research Program of competitive grants to universities (\$6,000,000 per year through FY95); and (3) a series of Port Oil Pollution Minimization Demonstration Projects (\$3,000,000 per year through FY95). These programs are more fully described in Sections 3 and 4.

3. Interagency Committee Accomplishments During the Past Two Years (FY91-92)

3.1 Quarterly Meetings.

The Interagency Committee holds quarterly meetings which alternate between Washington, D.C. and R&D facilities throughout the U. S. During FY92 the Interagency Committee visited each R&D facility specifically named in Title VII including: the National Spill Control School at Corpus Christi State University in September 1991 (Section 7001(c)(2)(D)); National Maritime Research Center at the U. S. Merchant Marine Academy in March 1992 (Section 7001(c)(5)); and Oil and Hazardous Materials Environmental Test Tank (OHMSETT) at Leonardo, NJ in September 1992 (Section 7001(c)(7)).

3.2 Workshops.

Periodically, R&D subcommittees have sponsored workshops to review R&D programs contained in annexes to the Oil Pollution Research and Technology Plan. A Spill Prevention Research workshop was held in August 1991 and a Spill Response Planning and Management workshop was held in January 1992.

3.3 Oil Pollution Research and Technology Plan.

The Oil Pollution Research and Technology Plan required by Section 7001(b) was submitted to Congress by the Interagency Committee on April 24, 1992. It is a comprehensive, coordinated 5-year plan for federal oil pollution R&D. There are five categories of oil pollution R&D in the Research

Plan: Spill Prevention (Annex 3.1); Spill Response Planning and Management (Annex 3.2); Spill Response (Annex 3.3); Fate, Transport and Effects of Oil (Annex 3.4); and Restoration and Rehabilitation (Annex 3.5).

The Research Plan includes both Level I and Level II R&D. Level I is agency oil pollution R&D funded from base budgets. Level II is additional oil pollution R&D funded from the Oil Spill Liability Trust Fund based on authorizations contained in Title VII of OPA 90.

The 11 member National Research Council/Marine Board (NRC/MB) Committee on Oil Spill R&D recently completed an interim report for the first year of a 3-year review of the Research Plan. Copies of this report, Review of the Interagency Oil Pollution Research and Technology Plan: First Report of the Committee on Oil Spill Research and Development, were sent directly to Congress by the Marine Board during May 1993. The Interagency Committee was required to contract with the National Research Council for an assessment of the adequacy of the Research Plan by Section 7001(b)(2)(B) of OPA 90. The Interagency Committee responses to recommendations contained in the NRC/MB report are included in Section 6.

3.4 First International Oil Spill R&D Forum.

The Interagency Committee hosted the First International Oil Spill R&D Forum during June 1-4, 1992 near Washington, D.C. The Forum was co-sponsored by the U. S. Coast Guard, on behalf of the Interagency Committee, and the International Maritime Organization (IMO). The Forum was attended by 400 R&D professionals from 19 countries. A Proceedings was published in October 1992. The purpose of the Forum was to give effect to Article 8 of the International Convention on Oil Pollution Preparedness, Response and Cooperation of 1990 (OPRC 90) which mandates international cooperation on oil spill R&D.

3.5 International Oil Pollution R&D Abstract Database.

The U. S. Coast Guard, on behalf of the Interagency Committee, developed the International Oil Pollution R&D Abstract Database. The Database is a Hypercard application on Macintosh using the same search engine as the Computer Assisted Management of Emergency Operations (CAMEO) program developed by

the National Oceanic and Atmospheric Administration (NOAA). A preliminary version was distributed during the First International Oil Spill R&D Forum containing about 230 abstracts of funded projects mainly sponsored by the U. S. and Canada. The purpose of the Database is information sharing in order to promote cooperation on R&D and jointly funded projects where possible.

3.6 Activities to Promote Cooperation on R&D.

The Interagency Committee has staffed information booths at several oil pollution conferences in order to promote cooperation on R&D. During FY92-93 these conferences included: the Oil Spill Prevention and Response Expo '92 in Seattle, WA; CLEAN GULF '92 in Austin, TX; and the 1993 International Oil Spill Conference in Tampa, FL. The Interagency Committee has printed several publications to help promote cooperation on oil pollution R&D that have been distributed by mail and at conferences. These publications include: the Oil Pollution Research and Technology Plan (April 1992), International Oil Pollution R&D Abstract Database (June 1992), Introducing...the Interagency Coordinating Committee on Oil Pollution Research (October 1992), and the Proceedings From the First International Oil Spill R&D Forum (October 1992). In addition, the interim report of the NRC/MB Committee on Oil Spill R&D, Review of the Interagency Oil Pollution Research and Technology Plan: First Report of the Committee on Oil Spill Research and Development (May 1993) is available. Most of the publications may be ordered from the National Technical Information Service.

3.7 Coordination With States and Industry.

The Interagency Committee has contacted representatives from several States to begin discussions about Federal-State coordination of oil pollution R&D including: Alaska, Washington and Texas. In addition, the Chairman of the Interagency Committee is a member of the R&D Advisory Committee (RDAC) for the Marine Spill Response Corporation (MSRC). In that role he helps to coordinate the R&D programs of the Federal agencies and the MSRC.

4. Interagency Committee Planned Activities For the Next Two Years (FY93-94).

4.1 Second International Oil Spill R&D Forum.

The Interagency Committee and International Maritime

Organization (IMO) will cosponsor the second Forum in London, December 5-9, 1994. It is possible that the European Community (EC) may also be a sponsor. The Marine Environment Division at IMO has formed a planning committee.

4.2 Revised/Expanded International Oil Pollution R&D Abstract Database.

A revised and expanded Database will be published by the Interagency Committee later this year. Administration of the Database will be assumed by the Marine Environment Division at IMO in 1994. Future versions will be published to coincide with the biennial Forum.

4.3 Revised Oil Pollution Research and Technology Plan.

The Interagency Committee will revise its Research Plan during FY94. The revision will include projected funding for FY96-97, actual appropriations for FY93-94, and it will reflect recommendations of the NRC/MB Committee on Oil Spill R&D where applicable. The revised Research Plan will be used by Federal agencies to submit appropriations requests for FY96 and beyond.

4.4 Regional Research Program.

The Interagency Committee will establish a Regional Research Program of competitive R&D grants to universities and nonprofit research institutions during FY93. The U. S. Coast Guard received \$750,000 in appropriations for the Regional Research Program in FY93. No other Federal agencies received appropriations for the Regional Research Program. The Volpe Transportation Systems Center (VTSC) will administer the grant program on behalf of the U. S. Coast Guard and the Interagency Committee. It will be a directed grant program emphasizing cost-sharing and based on R&D needs and priorities identified in the Research Plan.

4.5 Port Oil Pollution Minimization Demonstration Projects.

The U. S. Coast Guard has planned Port Oil Pollution Minimization Demonstration Projects for New York and New Orleans in FY94 and Los Angeles/Long Beach and the Great Lakes in FY95. There will be public demonstrations of new technologies developed by the Level II R&D program that address special needs of each region.

4.6 Oil Spill Model/Analysis of R&D Needs and Priorities.

The Interagency Committee is planning to develop a computer model of the oil spill system using actual oil spill statistics from Federal databases. Analysis of the model will help identify oil spill needs more accurately than the present method of using workshops with groups of subject matter experts.

5. OPA 90 R&D Funding Issues.

5.1 First Year of Appropriations.

Section 7001(f)(2) of OPA 90 states that all authorizations for R&D programs from the Oil Spill Liability Trust Fund are subject to appropriations. This provision effectively added a two year lead time for obtaining funding. As a result, FY93 was the first year with any appropriations from the Oil Spill Liability Trust Fund for Level II (OPA 90) R&D and the Regional Research Program. No appropriations were requested by the U. S. Coast Guard for the Port Demonstration Projects until the FY94 budget since no OPA 90 R&D will have been completed before then.

5.2 Agency Budget Ceilings.

Spending caps contained in the Budget Enforcement Act (BEA) of 1990 have imposed ceilings on agency budgets so that no "new" money is available to fund the new OPA 90 R&D programs. As a result, agencies must terminate other high priority R&D in order to free up funds for OPA 90 R&D in a "zero sum game". The practical consequence of this situation is that just \$12,560,000 was appropriated from the Oil Spill Liability Trust Fund for OPA 90 R&D in FY93 even though \$28,000,000 was authorized. Only four agencies received appropriations: U. S. Coast Guard (\$5,595,000); Minerals Management Service (\$4,400,000); Environmental Protection Agency (\$2,015,000); and the Research and Special Programs Administration (\$550,000). These figures are deceiving, however, since none of these agencies received R&D budget increases to fund OPA 90 R&D in FY93.

5.3 Difficulty Counting Funding for OPA 90 R&D Programs.

It is very difficult to count funding for OPA 90 R&D

programs. The U. S. Coast Guard experience in FY93 is instructive. The U. S. Coast Guard's share of Level II R&D in the Oil Pollution Research and Technology Plan for FY93 was \$5,015,000. Due to budget ceiling concerns, the U. S. Coast Guard only requested \$2,000,000 for Level II R&D on budget sheets submitted to Congress. Congress ultimately approved \$1,850,000 for Level II R&D. However, Congress appropriated \$5,595,000 of the U. S. Coast Guard's total \$27,815,000 R&D budget from the Oil Spill Liability Trust Fund. Finally, the U. S. Coast Guard's total R&D budget was cut from \$29,150,000 in FY92 to \$27,815,000 in FY93 - a reduction of \$1,335,000 during the first year of funding for OPA 90 R&D. The second year of funding for OPA 90 R&D will see an even greater cut since the U. S. Coast Guard's FY94 R&D budget passback from the House was reduced to \$22,500,000 from a request of \$25,000,000. On the basis of appropriations from the Oil Spill Liability Trust Fund alone it could be concluded that the U. S. Coast Guard was fully funded for Level II R&D. An examination of budget sheets reveals that less than half of the Level II R&D was funded. From the perspective of the total budget it could be argued that Level II R&D was unfunded since no new money was provided.

5.4 Congressional Appropriations Subcommittees With Jurisdiction Over Agency Budgets.

Each agency must seek its share of Level II funding separately because the budget ceilings make it impossible for a single agency to act as banker. There are five House and five Senate appropriations subcommittees with jurisdiction over the budgets of the 12 agencies and 1 Department represented on the Interagency Committee. This makes coordination of oil pollution R&D among Federal agencies extremely difficult.

5.5 Possible Solutions.

The Interagency Committee has debated the funding issues and is unable to reach a solution. The U. S. Coast Guard has discussed these issues with DOT and the Office of Management and Budget (OMB) without resolution. If the monies from the Oil Spill Liability Trust Fund weren't subject to agency ceilings and if the Trust Fund disbursements were made automatically each year, there would be predictable and full funding of OPA 90 R&D. Given

the general Federal budget deficit problems this solution isn't likely. As a result, it is reasonable to expect that little OPA 90 R&D will be funded.

6. Interagency Committee Responses to Recommendations of the Marine Board Committee on Oil Spill R&D.

6.1 Oil Spill System Analysis.

The Interagency Committee agrees that the use of oil spill system analysis will more accurately identify oil spill R&D needs and priorities for the full range of spill sizes and impacted environments. The U. S. Coast Guard plans to develop an oil spill model as a computer application accessing historical oil spill statistics from existing Federal databases and particularly the Marine Safety Information System (MSIS). Recently, the U. S. Coast Guard developed a spill database using MSIS entries for 1973-1992 that contains information on oil type, spill size, spill location, and spill cause. The addition of vessel traffic information permits the calculation of spill risk also.

The oil spill system analysis won't replace the judgement of experienced professionals however. Workshops with spill cleanup experts provide valuable insights into R&D needs by identifying operational problems, e.g. limitations of equipment or practices, performance of new technologies. Moreover, lessons learned from spills are not available in conventional spill databases.

6.2 Field Testing.

The Interagency Committee agrees that field testing is a necessary, vital, and required component of the OPA 90 oil spill R&D program and should be enhanced in the Research Plan. The Research Plan already includes projects for at-sea tests of response equipment; field testing of surveillance equipment; field testing of in situ burning; and field testing of chemical, biological and mechanical shoreline cleanup technologies. Controlled releases provide better research than spills of opportunity. The Interagency Committee participated in a planned spill and in situ burn experiment near St. John's, Newfoundland between August 5 - 15, 1993. The experiment follows five years of laboratory and tank testing to determine the nature and concentrations of emissions from in situ burning of oil. The

scientific information gathered from this experiment may be used to validate testing criteria in the U.S.

Controlled field testing to evaluate real-world application of oil spill prevention and mitigation technologies is also mandated by Section 7001(c)(3)(C). In a related provision, Section 7001(c)(7) requires the long-term use of OHMSETT. This facility allows the simulation of at-sea conditions in a controlled environment.

6.3 The Impact of Public Perception on the Use of New Response Technologies.

The Interagency Committee agrees that public perceptions about harmful side-effects of chemical dispersant and bioremediation technologies or in situ burning must be weighed in the Research Plan. While the use of these technologies are operational and policy matters, the expenditure of limited R&D budgets on the development of technologies that will never be used must be avoided. However, thorough research and more effective communication with the public of the hazards of each technology can help correct public misperceptions.

6.4 Coordinating Federal R&D With Other R&D Worldwide.

The Interagency Committee agrees that a review of past and present oil spill R&D worldwide is important to prevent unnecessary duplication in the Research Plan. The Interagency Committee sponsored the First International Oil Spill R&D Forum and developed the International Oil Pollution R&D Abstract Database to open lines of communication with other sponsors of oil spill R&D worldwide. The Interagency Committee is committed to supporting these initiatives in the long term as the most effective method of complying with its purposes of coordinating and cooperating on oil spill R&D mandated by Section 7001(a)(2) of OPA 90.

The Interagency Committee has taken some steps to coordinate its Research Plan with other R&D efforts by States and industry. For instance, the Interagency Committee has agreed to assist the Alaska Department of Environmental Conservation in developing an arctic/subarctic oil spill R&D plan complimentary to Federal R&D work. Additionally, the Chairman of the Interagency Committee is a member of the R&D Advisory Committee of the Marine Spill Response Corporation in order to help coordinate both efforts and share information.

6.5 Congressional Appropriations for Research Plan.

The Interagency Committee agrees that funding has been inadequate to implement the Research Plan. The agencies are very aware of competing priorities for limited Federal budget dollars. Funding will almost certainly continue to be the key issue in oil spill R&D in the foreseeable future. Appropriations fall far short of authorizations in Title VII of OPA 90. As a result, some agencies have increased oil spill R&D at the expense of R&D necessary to support other agency responsibilities. However, independent agency funding of oil spill R&D may lead to major gaps in implementing the Research Plan.

Limited funding narrows the scope of research and extends completion dates. Leveraging Federal R&D funds through joint projects helps but it is no substitute for adequate funding.

Government-sponsored R&D is the majority of current oil spill R&D worldwide. If the government doesn't fund oil spill R&D, very little will be done. Even MSRC's ambitious R&D program has limited funding and is narrowly focused on response technologies to support its field organization.

7. Attachments.

- 7.1 Interagency Committee. Oil Pollution Research and Technology Plan (April 1992)
NTIS Accession No. PB92 193283
- 7.2 Interagency Committee. International Oil Pollution R&D Abstract Database (June 1992).
NTIS Accession No. PB93 137024
- 7.3 Interagency Committee. Proceedings from the First International Oil Spill R&D Forum (October 1992).
NTIS Accession No. PB93 135770
- 7.4 Interagency Committee. Introducing...the Interagency Coordinating Committee on Oil Pollution Research (October 1992).
- 7.5 National Research Council/Marine Board Committee on Oil Spill Research and Development. Review of the Interagency Oil Pollution Research and Technology Plan: First Report of the Committee on Oil Spill Research and Development (May 1993).