exemption (TME) under section 5(h)(1) of the Toxic Substances Control Act (TSCA) and 40 CFR 720.38. EPA designated the original test marketing application as TME-89-26. The test marketing conditions are described below.

EFFECTIVE DATE: October 9, 1990.

FOR FURTHER INFORMATION CONTACT: Andrea Pfahles-Hutchens, New Chemical Branch, Chemical Control Division (TS-794), Office of Toxic Substances, Environmental Protection Agency, Rm. E-611, 401 M St., SW., Washington, DC 20460, (202) 382-2255.

SUPPLEMENTARY INFORMATION: Section 5(h)(1) of TSCA authorizes EPA to exempt persons from premanufacture notification (PMN) requirements and permit them to manufacture or import new chemical substances for test marketing purposes if the Agency finds that the manufacture, processing, distribution in commerce, use and disposal of the substances for test marketing purposes will not present an unreasonable risk of injury to health or the environment. EPA may impose restrictions on test marketing activities and may modify or revoke a test marketing exemption upon receipt of new information which casts significant doubt on its finding that the test marketing activity will not present an unreasonable risk of injury.

EPA hereby approves the modification of the test marketing period for TME-89-26. EPA has determined that test marketing of the new chemical substance described below, under the conditions set out in the TME application, and for the modified time period specified in the modification request, will not present an unreasonable risk of injury to health or the environment. Production volume, use, and the number of customers must not exceed that specified in the application. All other conditions and restrictions described in the original notice of approval of test marketing application remain the same.

T-89-26

Notice of Approval of Original Application: October 10, 1989 (54 FR 42840).

Modified Test Marketing Period: Confidential.

Commencing on: Confidential.

The Agency reserves the right to rescind approval or modify the conditions and restrictions of an exemption should any new information come to its attention which casts significant doubt on its finding that the test marketing activities will not present an unreasonable risk of injury to health or the environment.

Dated: October 9, 1990.

John W. Melone,

Director, Chemical Control Division, Office of Toxic Substances.

[FR Doc 90-27203 Filed 11-16-90; 8:45 am]

BILLING CODE 6560-50-F

[WH-FRL-3861-4]

Prince William Sound and Gulf of Alaska; Restoration Work Plan and Program

AGENCY: Environmental Protection Agency and Alaska Department of Fish and Game.

ACTION: Notice of intent to prepare a draft restoration work plan and to propose a 1991 restoration program.

SUMMARY: The Environmental Protection Agency (EPA), on behalf of the Federal trustees (the Departments of the Interior and Agriculture and the National Oceanic and Atmospheric Administration) and the Alaska Department of Fish and Game (ADF&G), on behalf of the State Trustee, are announcing the intent of the Federal and State governments to prepare a draft restoration work plan for the Prince William Sound and the Gulf of Alaska, and to propose a restoration program for the 1991 field season.

DATES: The Federal and State of Alaska governments intend to jointly publish a draft restoration work plan and a restoration program for the 1991 field season in the Federal Register on or about December 28, 1990, and will accept comments on the draft plan and proposed 1991 projects for 30 days after the publication of that notice.

FOR FURTHER INFORMATION CONTACT: Susan MacMullin—EPA, Washington, DC (202/483-7166) or Stanley Senner—ADF&G, Anchorage, AK (907/271-2461).

SUPPLEMENTARY INFORMATION:

I. Background

The March 24, 1989, grounding of the tanker *Exxon Valdez* in Alaska's Prince William Sound caused the largest oilspill in U.S. history. A slick containing about 11 million gallons of North Slope crude oil covered the western portion of the Sound and moved to Cook Inlet and along the Gulf of Alaska. More than 1,000 miles of shoreline were affected, including State and national forests, wildlife refuges, and parks. The spill damaged areas extremely rich in natural resources. It injured fish, birds, mammals, intertidal and subtidal plants and animals and their associated habitats. The area's important historical and archaeological resources also were injured as a result of oiling and cleanup activities. The oil also adversely affected intrinsic values.

Soon after the spill occurred, President Bush and Alaska Governor Cowper expressed the desire that the environment and economy of Prince William Sound and the Gulf of Alaska be fully restored. Responsibility for full restoration of these natural resources and the services they provide rests with Federal and State agencies.

Both Federal and State law provide authority for response, damage assessment, and restoration actions undertaken following the *Exxon Valdez* oilspill. Under Federal law, section 107(f) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and section 311(f) of the Federal Water Pollution Control Act (Clean Water Act) provide for Federal and State officials to act as trustees on behalf of the injured, lost and destroyed natural resources and to pursue recovery of damages for injury, loss or destruction of these resources. Federal law authorizes the State and Federal governments to present claims to the responsible parties for damages for injury, loss or destruction of natural resources and their uses. The funds received from these claims must be used to restore, replace or acquire the equivalent of the natural resources and services injured, lost or destroyed by the spill.

CERCLA applies to releases of hazardous substances other than oil, while the Clean Water Act applies to oilspills. Both laws are supplemented by the National Contingency Plan (40 CFR part 300) and the Natural Resource Damage Assessment (NRDA) regulations (43 CFR part 11) which set out a process, which is not mandatory, for determining proper compensation to the public for injury, loss or destruction of natural resources. In this case, the natural resource trustees have not made a final decision on whether to follow the NRDA regulations. In combination, these laws and regulations provide the structure for the Federal/State response, damage assessment, and restoration activities following the *Exxon Valdez* oilspill.

Restoration (including actions to restore, replace or acquire the equivalent of resources) is one component of this process. Combined with response, cleanup and the damage assessment process, these efforts seek to minimize adverse impacts and compensate the public for natural resource injury, loss, or destruction and

lost use and intrinsic values, by restoring the resources and the services they provide.

Response activities include the initial emergency measures to contain the spilled oil and minimize adverse impacts, as well as the subsequent efforts to clean up oil from the spill area. The magnitude of and circumstances surrounding the *Exxon Valdez* oil spill resulted in relatively little of the spilled oil being contained. Consequently, cleanup activity has focused primarily on removing oil from the shoreline areas affected by the spill. Cleanup activities continued through the summer of 1990 and are expected to resume next year.

In 1989, State and Federal natural resource trustee agencies initiated scientific studies after the oil spill to assess the amount of damage. Most of these studies were continued into 1990, with a number of new studies being initiated as well. This damage assessment process, which is comprised of data collection and analysis components, will continue in 1991. It is designed to identify and quantify the specific resource injury, loss, or destruction and to determine corresponding monetary values. These monetary values include restoration costs, as well as lost-use and intrinsic values. Claims for those damages will be presented to the responsible parties, and under Federal law, the monies received must be used for restoration, replacement or acquisition of equivalent resources.

Restoration builds upon the spill response and damage assessment process by planning for, and then implementing, activities to restore the injured, lost or damaged environment.

The NRDA regulations define "restoration" or "rehabilitation" as . . . "actions undertaken to return an injured resources to its baseline condition as measured in terms of the injured resource's physical, chemical, or biological properties or the services it previously provided . . ." The preceding definition of restoration from the NRDA regulations is provided in this notice for informational purposes. As mentioned earlier, the NRDA regulations are not mandatory.

Generally, the concept of "restoration" includes direct restoration, replacement and the acquisition of equivalent resources:

- Direct restoration refers to measures, in addition to response actions, taken, usually on-site, to directly rehabilitate an injured, lost or destroyed resource.
- Replacement refers to substituting one resource for an injured, lost or destroyed resource of the same or similar type.
- Acquisition of equivalent resources includes the purchase or protection of resources to enhance the recovery, productivity, and survival of the ecosystems affected by the oil spill.

The goal of the restoration planning effort is to identify appropriate measures that can be taken to restore natural resources affected by the *Exxon Valdez* oil spill. Specific objectives include:

- Identify or develop technically feasible restoration options for natural resources and services potentially affected by the oil spill.
- Determine the nature and pace of natural recovery of injured resources, and identify where direct restoration measures may be appropriate.
- Incorporate an approach to restoration that, where appropriate, focuses on recovery of ecosystems, rather than on the individual components of those systems.
- Identify the costs associated with implementing restoration measures, in support of the overall natural resource damage assessment process.
- Encourage, provide for and be responsive to public participation and review during the restoration planning process.

Among the documents now available on the restoration program are several compiled by the Restoration Planning Work Group (RPWG), which is composed of representatives from the U.S. Departments of Agriculture and the Interior, NOAA, EPA and the Alaska Departments of Environmental Conservation, Fish and Game, and Natural Resources. The RPWG is responsible for planning for the restoration of the areas affected by the *Exxon Valdez* oil spill. To that end, the RPWG has undertaken to gather and develop information on all aspects of restoration related to oil spills.

During the past 18 months, EPA conducted a computerized literature search to identify restoration approaches that have potential for success, as well as actions to avoid. The databases searched were: Aquatic Science Abstracts (1978–1990), BIOSIS Previews (1970–1990) Environmental Bibliography (1968–1989), ENVIROLINE (1970–1989), Pollution Abstracts (1970–1990), and NTIS (1964–1990). The search yield approximately 450 publications. EPA then reviewed the titles and abstracts and identified the most relevant publications for acquisition and detailed review. Articles were selected according to the following criteria:

- Techniques potentially applicable to sub-arctic conditions;
- Restoration of the same resources as those that may have been damaged by the *Exxon Valdez* oil spill;
- Creation of new aquatic habitats (by dredge-and-fill techniques, construction of artificial reefs, etc);
- success of organisms grown in or transplanted to oil-contaminated substrates;
- Approaches and techniques for long-term monitoring studies.

This selective bibliography (approximately 200 citations) is found in appendix A to this notice. The full bibliography of about 450 citations (Item 1, appendix B) is available as noted in appendix B.

The RPWG has developed two reports which are publicly available. One documents the proceedings of an oil spill restoration symposium held on March 26–27, 1990, in Anchorage, Alaska (Item 2, appendix B). The symposium began with introductory statements by Dennis Kelso, Commissioner of the Alaska Department of Environmental Conservation, and Tom Dunne, Acting Regional Administrator of the U.S. Environmental Protection Agency. These opening remarks described the restoration planning process and its objectives. Three keynote speakers addressed the symposium on legal issues related to the damage assessment and restoration process, experiences with restoration of nonmarine ecosystems and public participation in the planning process. A final keynote speaker provided an overview of restoration concepts.

Panel discussions comprised the remainder of the symposium. Sessions addressed direct and indirect restoration of six categories of resources or their uses: Coastal habitats, fisheries, marine and terrestrial mammals, birds, cultural resources and recreation uses. Panelists included experts on restoration in each of these six categories, as well as representatives from various resource user groups, Alaska Native corporations, public land managers, environmental interest groups and the timber and tourism industries. All panel sessions included opportunities for questions and comments from the public, and an extended public comment session took place at the end of the symposium.

Restoration concepts and ideas discussed at the symposium can be grouped into three categories. Broad restoration approaches and philosophies; recommendations for public participation during the restoration planning process; and addressing restoration of specific

resources (e.g., fisheries, mammals, cultural resources).

The second report is the August 1990 progress report, "Restoration Planning Following the *Exxon Valdez* Oil Spill" (Item 3, appendix B), which summarizes the RPWG activities to date. Its chapters present discussions on public participation programs, a technical workshop, the literature review, and restoration feasibility studies. The report also organizes a possible restoration program in a series of matrices for birds, mammals, fish and shellfish, coastal habitats, recreational uses, cultural resources and multiple resources and values. Within each matrix, categories of potentially injured, lost or destroyed resources are cross-referenced to potential restoration approaches.

The report also offers a discussion of future restoration planning activities, including the evaluation and selection of restoration options and development of a final restoration plan.

The RPWG has undertaken a series of restoration studies designed to assess the potential of direct restoration techniques for some of the resources injured by the oil spill. The study titles are as follows:

Restoration Feasibility Study No. 1.	Re-establishment of *Fucus in Rocky Intertidal Ecosystems.*
Restoration Feasibility Study No. 2.	Re-establishment of Critical Fauna in Rocky Intertidal Ecosystems.
Restoration Feasibility Study No. 3.	Identification of Potential Sites for Stabilization and Restoration of Beach Wild Rye.
Restoration Feasibility Study No. 4.	Identification of Upland Habitats used by Wildlife Affected by the Exxon Valdez oil spill.
Restoration Feasibility Study No. 5.	Land Status, Uses, and Management Plans in Relation to Natural Resources and Service.

There Restoration Technical Support Projects are also being carried out in 1990. The first project will support development of detailed plans for potential restoration studies in 1991, including, but not limited to:

- "Natural recovery" monitoring;
- Pink salmon stock identification;
- Herring stock identification/spawing site inventory;
- Artifical habitat construction for fish and shellfish;
- Alternative recreation site/facility identification;
- Historic site/artifact restoration; and,
- Forage fish availability.

A second Restoration Technical Support Project will develop and implement a scientific peer review process for the feasibility studies and potential restoration projects.

The third Restoration Technical Support Project will assess and summarize existing beach segment survey data to identify sites for future restoration projects.

These studies are summarized in the document "The 1990 State/Federal Natural Resource Damage Assessment and Restoration Plans for the Exxon Valdez Oil Spill (Item 4, appendix B). Included in this document are responses to public comments received concerning the 1989 damage assessment report (Item 5, appendix B). Commenters responded to a general section that briefly discussed restoration planning as a goal for the upcoming year.

II. Notice of Intent to Publish a Draft Restoration Work Plan and a Proposed Restoration Program for the 1991 Field Season

EPA, on behalf of the Federal trustee agenciers, and ADF&G, on behalf of the State Trustee, are announcing the intent of the Federal and State of Alaska governments to jointly publish in the Federal Register on or about December 28, 1990 the following:

- A draft restoration work plan that addresses appropriate steps for long-range restoration or Prince William Sound and the Gulf of Alaska.
- A proposed restoration program for the 1991 field season.

The draft restoration work plan is expected to provide the public with information about the restoration plans of the Federal and State trustees and identify a proposed program, including restoration projects, that may be implemented in 1991. Development of this work plan is not required by the NRDA regulations. The Federal and State governments expect the parties responsible for the oil spill to pay for these projects.

The State and Federal governments will request public comment on restoration priorities and methods upon the publication of the draft restoration work plan in the Federal Register. The restoration work plan will not be the final restoration plan, but an opportunity for further public participation in the restoration planning process.

Dated: October 24, 1990.

LaJuana S. Wilcher,

Assistant Administrator, Office of Water, Environmental Protection Agency.

Dated: October 30, 1990.

Gregg K. Erickson,

Director, Division of Oil Spill Impact Assessment and Restoration, Alaska Department of Fish and Game.

Appendix A

Addy, J.M.; Levell, D. (1975). Sand and mud fauna and the effects of oil pollution and cleansing. Presented at the Institute of Petroleum/Field Studies Council Meeting on Marine Ecology and Oil Pollution, Scotland, April 21–25, 1975. P91 (100).

Anderson, J.W., Riley, R.G.; Bean, R.M. (1978). Recruitment of Benthic Animals as a Function of Petroleum Hydrocarbon Concentrations in the Sediment. Journal of the Fisheries Research Board of Canada, Vol. 35, No. 5, pp. 776–790.

Anderson, R.C. (1983). Economic perspectives on oil spill damage assessment. Oil Petrochem. Pollut., Vol. 1, No. 2, pp. 79–84

Anonymous (1986). Oil recovery specialist battles against the black stuff. Water Waste Treatment, Vol 29, No. 2, p. 36

Ardizzone, G.D.; Bombace, G. (1983). Artificial reef experiments along a Tyrrhenian sea coast. Seminar on Scientific Aspects of Artificial Reefs and Floating Mariculture in the Mediterranean, Cannes, December 7, 1982.

Armstrong, N.E. (1982). Spill cleanup. Part 3, biological measures. In: Hazardous Materials Spills Handbook. McGraw-Hill Book Co., NY

Armstrong, N.E., Gloyna, E.F., Wyss, O. (1984). Biological countermeasures for the control of hazardous material spills. NTIS, Springfield, VA (USA). Report Number: NTIS PB84–140278

Army Engineer District, Mobile, AL (USA). (1984). Exploration and production of hydrocarbon resources in coastal Alabama and Mississippi. Final Generic Environmental Impact Statement. 1006 pp. NTIS Number: AD–A154 316/4/GAR. Report Number: COESAM/PD–EE–84–009.

Artificial reefs. (1986). Technology, Vol. 8, No. 6. Publisher: PCARRD, Los Banos (Phillipines), 16 pp. (Received July, 1989). Report Number: ISSN 0115–7787

Ash, C.; Garrett, C.; Gray, S. (1988). Prevention and cleanup of petrolem contamination of ground water Florida s Super Act. Fla Sci 52 (4). 225–229.

Aska, D.Y. (editor). (1981). Artificial reefs: Proceedings of a Conference Held September 13–15, 1979, in Daytona Beach, Florida. Conference on Artificial Reefs Daytona Beach, FL (USA) 13 Sep 1979. Rep. Fla. Sea Grant Program. Publisher(s): FSG, Gainesville, FL (USA), 235 pp. Report Number: FSG–R–41

Atlas, R.M. (1978). Potential interaction of microorganisms and pollutants from petroleum development. In: Marine Biological Effects of OCS Petroleum Development. Wolfe, D.A., ed. . Presented at the Formal Scientific Review of

Biological Effects Studies, Seattle, WA (USA), Nov 29, 1977. Report Number: NOAA-TM-ERL-OCSEAP-1. pp. 156-166. Publisher(s): NOAA ERL, Boulder, CO (USA).

Atlas, R.M.; Horowitz, A.; Busdosh, M. (1978). Prudhoe crude oil in arctic marine ice, water, and sediment ecosystems: Degradation and interactions with microbial and benthic communities. Presented at the Symposium on Recovery Potential of Oil Marine Norther Environments Halifax (Canada) 10 Oct 1977. J. Fish. Res. Board Can. 35(4), 585-590.

Axiak, V.; George, J.J. (1987). Behavioral responses of a marine bivalve (Venus verrucosa) to pollution by petroleum hydrocarbons. Water Air Soil Pollut., Vol. 35, No. 3-4, pp. 395-410.

Baker, J.M. (1970). The Effects of Oils on Plants. Environ. Pollut. (1), pp. 27-44.

Baker, J.M. (1975?). The Field Studies Council Oil Pollution Research Unit. Presented at Inst of Petroleum/Field Studies Council Meeting on Marine Ecology and Oil Pollution, Scotland, Apr 21-23, 1975, P17 (3).

Bakke, T. (1986?). Experimental long term oil pollution in a boreal rocky shore environment. Env Canada 9th Arctic Marine Oil Spill Technical Seminar, Edmonton, Jun 10-12, 1986, P167(12).

Beillois, P.; Desaunay, Y.; Dorel, D.; Lemoine, M. (1979). Pollution effects after the Amoco Cadiz grounding: Conditions of fishery resources in the Bays of Morlaix and Lannion. Report Institut Scientifique et Technique des Peches Maritimes, Nantes, France, January, 1979.

Bender, M.E.; Shearls, E.A.; Ayres, R.P.; Hershner, C.H.; Huggett, R.J. (1977). Ecological effects of experimental oil spills on eastern coastal plain estaurine ecosystems. Presented at the Oil Spill Conference, New Orleans, LA (USA), 8 Mar 1977. Publisher(s): American Petroleum Inst., Washington, DC (USA), p. 505-509. Report Number: API-Pub-4284

Bender, M.E.; Shearls, E.A.; Murray, L.; Huggett, R.J. (1980). Ecological effects of experimental oil spills in eastern coastal plain estuaries. Environ. Int., 3(2):121-133.

Biological Sciences Department, Floridan International University, Miami, FL 33199 (USA). (1980). Mitigation of estuarine fisheries nurseries: Seagrass Restoration. Presented at the Mitigation Symposium: A National Workshop on Mitigating Losses of Fish and Wildlife Habitats Fort Collins, CO (USA) 16 July, 1979. Gen. Tech. Rep. U.S. Department of Agriculture. U.S. Dept. Agriculture Fort Collins, CO (USA). Report Number: p 667-669

Bodennec, G.; Glemarec, G.; Grizel, M.; Kaas, H.; Legrand, R.; Le Moal, V.; Michel, P.; Miossec, P.; et al. (1983). Oil pollution impact on marine fauna and flora. Impact des hydrocarbures sur la flore et la faune marines. Rapport collectif. (Oil pollution impact on marine flora and fauna. A collective report.) Michel, P. ed., 1983., pp. 105-182. Contract CEE/ISTPM: BG/82/614 (629).

Bodin, P. (1986). Results of ecological monitoring of three beaches polluted by the Amoco Cadiz oil spill: Development of meiofauna from 1978 to 1984. Mar. Ecol. Prog. Ser., Vol. 42, No. 2, pp. 105-123

Bodin, P.; Boucher D. (1983). Medium-term evolution of meiobenthos and chlorophyll pigments on some beaches polluted by the Amoco Cadiz oil spill. Oceanol. Acta, Vol. 6, No. 3, pp. 321-332

Bombace, G. (1979). Experiments on artificial reefs in the central Adriatic (SE Conero, Ancona). 1st Convegno Scientifico Nazionale del Progetto Finalizzato Oceanografia e Fondi Marini Rome (Italy) March 5, 1979. Atti del Convegno Scientifico Nazionale (Roma 5-6-7 Marzo 1979). [Proceedings of the National Scientific Meeting (Rome 5-6-7 March)]. Vol. 1, pp. 185-198

Bombace, G.; Rossi, V. (1986). Socio-ecological effect following the construction of a marine area protected by artificial reefs in the Porto Recanati zone. Tech. Sonsult. of the General Fisheries Council for the Mediterranean on Open Sea Shellfish Culture in Association with Artificial Reefs Anconal (Italy) 17 March 1986. Inst. Ric. Pesca Marit., CNR, Molo Madracchio, 60100 Ancona, Italy. FAO Rapp. Peches., No. 357 (FAO fish. Rep.). Report of the Technical Consultation of the General Fisheries Council for the Mediterranean on Open Sea Shellfish Culture in Association with Artificial Reefs, Ancona, Italy, 17-19 March 1986. pp. 157-164. Report Number: ISBN 92-5-0024550-X

Bonsdorff, E. (1981). The Antonio Gramisci oil spill impact on the littoral and benthic ecosystems. Mar. Pollut. Bull., Vol. 12, No. 9, pp. 301-305

Botero, A.J.; Garzon, F.J.; Gutierrez, M.G. (1981). Establishment and development of a fish community in an artificial reef made from scrap tires. Bol. Mus. Mar. Bogota, No. 10, pp. 63-81.

Boucher, G.; Chamroux, S.; Riaux, C. (1984). Changes in physiochemical and biological characteristics of a sandy stretch of sublittoral sand polluted by hydrocarbons. Stn. Biol. de Roscoff, Pl. Georges Tessier, Roscoff 29211, France. Mar Environ Res 12(1):1-24. CODEN: MERSD

Breslin, V.T.; Roethel, F.J.; Schaeperkoetter, V.P. (1988). Physical and chemical interactions of stabilized incineration with the marine environment. 81st APCA Annual Meeting & Exhibition Dallas, TX (USA), June 19-24, 1988, p. 22

Broman, D.; Ganning, B.; Lindblad, C. (1983). Effects of high pressure, hot water shore cleaning after oil spills on shore ecosystems in the northern Baltic proper. Mar. Environ. Res., Vol. 10, No. 3, pp. 173-187.

Broome, S.W.; Seneca, E.D.; Woodhouse, W.W., Jr. (1988). Tidal salt marsh restoration. Aquat Bot 32(1-2):1-22.

Brown, C.H. (1978). The role of the U.S. Fish and Wildlife Service in responding to oil spills. Presented at: Energy/Environment 78 Los Angeles (USA) 22 Aug 1978. Dep. Interior, US Fish & Wildlife Serv. (ES), National Oil & Hazardous Substances Spill Coordinator, Washington, DC 20240, USA. In: Proceedings: Energy/Environment 78: a symposium on energy development impacts. Lindstedt-Siva, J. ed., Society of Petroleum Industry Biologists Los Angeles (USA). p 321.

Brown, D.J.S.; Baxter, A. (1984). August 1980 oil spill clean-up project—Bahrain report summary of task force operations. UNEP Reg. Seas Rep. Stud., No. 44, Combating Oil Pollution in the Kuwait Action Plan Region, pp. 125-146

Brown, J.; West, G.C. (1970). Tundra biome research in Alaska—the structure and function of cold-dominated ecosystems. Tundra Biome Analysis of Ecosystems, College, Alaska. Sponsor: Cold Regions Research and Engineering Lab., Hanover, N.H. Report No.: 70-1. 157 pp. NTIS Number: PC A08/MF A01

Brownlee, M.J.; Mattice, E.R.; Levings, C.D. (1984). The Campbell River Estuary: A report on the design, construction and preliminary follow-up study findings of intertidal marsh islands created for purposes of estuarine rehabilitation. Can. Manuscr. Rep. Fish. Aquat. Sci., No. 1783, 63 pp. Report Number: ISSN 0706-6473

Bublea, B. (1985). Effect of biological activity on the movement of fluids through porous rocks and sediments and its application to enhanced oil recovery. Baas Becking Geobiological Lab., Canberra, ACT 2601, Australia. Geomicrobiol J 4 (3), p. 313-328. CODEN: GEJOD

Butler, A.C.; Sibbald, R.R. (1986). Isolation and Gas Chromatagraphic Determination of Saturated and Polycyclic Aromatic Hydrocarbons in Mussels. Natl Inst for Water Research, South Africa. B Env Contam & Tox, V37, N4, P570(9). The original document is available from Bowker.

Butler, W.H. (1985). Multiple land use: An essential part of environmental planning. Apea J, Vol. 25, No. 1, P311(5).

Cadena, F.C. (1988). Treatment of water supplies contaminated with toxic pollutants using tailored soils. Sponsor: New Mexico State Univ., Las Cruces, NM; Water Resources Div., Geological Survey, Reston, VA. Report No.: WRRI-235. 63 pp. Prepared in cooperation with New Mexico State Univ., Las Cruces, NM. Sponsored by Water Resources Div., Geological Survey, Reston, VA. NTIS Number: PB89-151443/XAB

Cairns, J., Jr., Buikema, A.L. (1984). Restoration of habitats impacted by oil spills: Workshop summary. Restoration of Habitats Impacted by Oil Spills Symposium, Blacksburg, VA (USA) 9-11 Nov 1981. Dept. Biol., Univ. Cent. Environ. Stud., Virginia Polytech. Inst. and State Univ., Blacksburg, VA 24061, USA. Restoration of habitats impacted by oil spills. Cairns, J., Jr., and Buikema, A.L., eds. Pages 173-180. Report Number: ISBN 0-250-40551-2.

Cairns, J., Jr.; Dickson, K.L.; Herricks, E.E. (1977). Recovery and restoration of damaged ecosystems. International Sumposium on the Recovery of Damaged Ecosystems, Blacksburg, VA, March 23-25, 1975, 531 pp. Publisher(s): University Press of Virginia, Charlottesville, VA.

Canevari, G.P. (1979). The restoration of oiled shorelines by the proper use of chemical dispersants. Presented at the 1979 Oil Spill

Conference, Los Angeles, CA (USA), 19 Mar 1979. Proc. Oil Spill Conf. American Petroleum Institute Washington, DC (USA). p 443-446.

Carlisle, J.G., Jr. (1976). Artificial modification of the ecosystem. 1. Artificial reefs. 2. Offshore oil drilling platforms. Joint Oceanographic Assembly, Edinburgh (UK), September 13, 1976.

Carr, R.S.; Linden, O. (1984). Bioenergetic responses of Gammarus salinus and Mytilus edulis to oil and oil dispersants in a model ecosystem. Mar. Ecol. (Prog. Ser.), Vol. 19, No. 3, pp. 285-291.

Castle, R.W. (1977). Restoration of oil-contaminated shorelines. Presented at the Oil Spill Response Workshop, Metairie, LA (USA), February 15, 1977. In: Proceedings of the 1977 Oil Spill Response Workshop. Fore, P.L, ed. p 105-112. Publisher(s): U.S. Fish and Wildlife Service, Biological Services Program NSTL Station, MS.

Chamberlain, G. (1989). Technology tackles the oil spill. Design News, Jun 19, 89, P90(6).

Clark, R.B. (1982). Biological effects of oil pollution. Water Science and Technology, Vol. 14, No. 9-11, p. 1185. NOTE: Proceedings of the Eleventh Biennial Conference of the International Association on Water Pollution Research and Control, Cape Town, 29th March—2nd April 1982.

Clark, R.C., Jr.; Patten, B.G.; DeNike, E.E. (1978). Observations of a cold-water intertidal community after 5 years of a low-level, persistent oil spill from the General M.C. Meigs. Presented at the Symposium on Recovery Potential of Oiled Marine Northern Environments, Halifax (Canada), October 10, 1977. J. Fish. Res. Board Can. 35(5), 754-765.

Cole, J. (1979). Scientists guage extent of recovery after an oil spill. Smithsonian, V10, N7, P68 (7).

Cox, G.V.; Cowell, E.B. (1979). Mitigating oil spill damage—ecologically responsible clean-up techniques. Presented at the Mitigation Symposium: A National Workshop on Mitigating Losses of Fish and Wildlife Habitats, Fort Collins, CO (USA), July 16, 1979. Gen. Tech. Rep. U.S. Dept. Agric. U.S. Dept. Agriculture, Fort Collins, CO (USA). p. 121-128.

Craig, P.C.; Haldorson, L. (1979). Beaufort Sea barrier island-lagoon ecological process studies: Ecology of fishes in Simpson Lagoon, Beaufort Sea, Alaska. Environmental assessment of the Alaskan continental shelf. Annual reports of principal investigators for the year ending March 1979. Vol. 6: Effects. p. 363-470. Publisher(s): NOAA Environmental Research Labs, Boulder, CO (USA). Outer Continental Shelf Environmental Assessment Program.

Cundell, A.M.; Mitchell, R. (1977)., Microbial Succession on a wooden surface exposed to the sea. Lab Appl. Microbiol., Div. Eng Appl. Phys., Harvard Univ., Cambridge, MA 02138, USA. Int. Biodeterior. Bull., 13(3), 67-73.

Dauble, Dennis D.; Gray, Robert H.; Skalski, J.R.; Lusty, E.W.; Simmons, M.A. (1985). Avoidance of a Water-Soluble Fraction of Coal Liquid by Fathead Minnows. Transactions of the American Fisheries Society, Vol. 114, pp. 754-760.

Dauvin, J.C. (1987). Long term evolution (1978–1986) of the amphipod populations of the fine sand community of Pierre Noire (Bay of Morlaix, western English Channel) after the Amoco Cadiz disaster. Mar. Environ. Res., Vol. 21, No. 4, pp. 247-273.

de Jong, E. (1980). The effect of a crude oil spill on cereals. Environmental Pollution. Series A: Ecological and Biological, 22(3), 187-196.

Deis, D.R.; Dial, R.S.; Quammen, M.L. (1987). The use of mitigation in environmental planning for port development. Proceedings of the 10th National Conference on Estuarine and Coastal Management: Tools of the Trade, New Orleans, LA (USA), October 12–15, 1986. Vol. 2. Lynch, M.P.; McDonald, K.L., eds. Pages 707-718.

Dial, R.S.; Deis, D.R. (1986). Mitigation options for fish and wildlife resources affected by port and other water-dependent developments in Tampa Bay, Florida. NTIS Number: PB87-140703/GAR. 171 pp.

Diaz, R.J.; Boesch, D.F. (1977). Habitat development field investigations, Windmill Point Marsh Development Site, James River, Virginia. Appendix C. Environmental impacts of marsh development with dredged material: Acute impacts on the macrobenthic community. Technical Report, U.S. Army Corps of Engineers, Waterways Experimental Station. 158 p. Publisher(s): U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, VA (USA), November, 1977. Contract No. DACW66-75-C-0053.

Dibble, J.T.; Bartha, R. (1979). Rehabilitation of Oil-Inundated Agricultural Land: A Case History. Soil Science, Vol. 128, No. 1, pp. 56–60.

Dicks, B.; Iball, K. (1981?). Ten years of saltmarsh monitoring # the case history of a Southampton water saltmarsh and a changing refinery effluent discharge. Presented at EPA/API/USCG 1981 Oil Spill Conf, Atlanta, Mar 2–5, 81, P361 (14).

Dolah, R.F. van; Wendt, P.H.; Wenner, C.A.; Martore, R.M.; Sedberry, G.R. (1987). Environmental impact research program: Ecological effects of rubble weir jetty construction at Murrells Inlet, South Carolina. Volume 3, Community structure and habitat utilization of fishes and decapods associated with the jetties. Army Corps of Engineers, Waterways Experimental Station, Vicksburg, MS (USA). 163 pp. NTIS Number: AD-A187 676/2/GAR.

Dorrler, J.S. (1976?). Energy Resource Extraction: Oil And Gas Production. EPA, NJ. Presented at EPA Natl Conf on Healt, Env Effects, & Control Technology of Energy Use, Washington, DC, February 9–11, 76 (9). The original document is available from Bowker.

Eidam, C.L.; Hancock, J.A.; Jones, R.G.; Hanson, J.R.; Smith, D.C.; Hay, K.G.; McNeil, C.S.L. (1975?). Oil Spill Cleanup. EPA. Presented at EPA/API/USCG Conf on Prevention & Control of Oil Pollution, San Francisco, CA, March 25–27, 1975, P217 (52). The original document is available from Bowker.

Elouard, B.; Desrosiers, G.; Brethes, J.C.; Vigneault, Y. (1983). A study of a fish habitat created around islets of dredged material Grande-Entree lagoon, Magdalen Islands. Rapp. Tech. Can. Sci. Halieut. Aquat., No. 1209F, 77 pp. Report Number: ISSN 0706-6570.

Engelhardt, F.R.; Gilfillan, E.S.; Boehm, P.D.; Mageau, C. (1985). Metabolic effects and hydrocarbon fate in Arctic bivalves exposed to dispersed petroleum. Proceedings of the 3rd International Symposium on Responses of Marine Organisms to Pollutants Plymouth (UK) 17 Apr 1985. Moore, M.N., ed. Mar. Environ. Res., Vol. 17, No. 2–4, Pages 245–249.

Erwin, K.L.; Best, G.R. (1985). Marsh community development in a central Florida phosphate surface-mined reclaimed wetland. 8th Biennial International Estuarine Research Conference, Durham, NH (USA), July 28, 1985. Estuaries, Vol. 8, No. 2B, p. 111A.

Farrington, J.W. (1985). Oil pollution: A decade of research and monitoring. Oceanus, Fall 85, V28, N3, P2(11).

Faucher, C. (1983). Quantitative comparison of benthic populations on St. Efflam beaches. Etude de la Macrofaune du Microphytobenthos de la Meiofaune des Estrans et Etude des Chenaux des Abers, pp. 1–11. (Ecological Survey of Macrofauna, Microphytobenthos and Meiofauna of the Foreshore, and Survey of the Channels of the Abers Estuaries). Report Number: Contract CNEXO82/2604.

Federle, T.W.; Vestal, J.R.; Hater, G.R.; et al. (1979). Effects of Prudhoe Bay crude oil on primary production and zooplankton in arctic tundra thaw ponds. Marine Environmental Research 2(1), 3–18.

Fedkenheuer, A.W.; Heacock, H.M.; Lewis, D.L. (1980). Early performance of native shrubs and trees planted on amended Athabasca Oil Sand tailings. Reclamation Review, V3, N1, P47 (9).

Fickeinsen, D.H.; Vaughan, B.E. (1984). Behavior of Complex Mixtures in Aquatic Environments. PNL-5135. Pacific Northwest Laboratory Operated for the U.S. Department of Energy by Battelle Memorial Institute, Richland, WA.

Flower, R.J. (1983). Some effects of a small oil spill on the littoral community at Rathlin Island, Co. Antrim. Ir. Nat. J., Vol. 21, No. 3, pp. 117–120

Fonseca, M.S.; Kenworthy, W.; Phillips, R.C. (1982). A cost-evaluation technique for restoration of seagrass and other plant communities. Environ. Conserv., Vol. 9, No. 3, pp. 237–242.

Forget, C.A.; Sartor, J.D. (1971?). Earthmoving Equip for Restoration of Oil-Contaminated Beaches. API/EPA Conf June 15–17, 1971, Washington, DC P505. The original document is available from Bowker.

Franco, P.J.; Giddings, J.M.; Herbes, S.E.; Hook, L.A.; Newbold, J.D.; Roy, W.K.; Southworth, G.R.; Stewart, A.J. (1984). Effects of chronic exposure to coal-derived oil on freshwater ecosystems: 1. Microcosms. Environ. Toxicol. Chem., Vol. 3, No. 3, pp. 447–463.

Frankiewicz, T.C. (1980). Design and management for resource recovery. Vol. 1: Energy from Waste. Occidental Res. Corp. Frenkievicz, T.C., ed. Ann Arbor Science Publishers, Inc., Ann Arbor, MI, USA.

XIV + 209 pp. (illus.). Report Number: ISBN 0-250-40312-9. 0(0) CODEN: DMRRD

Fricke, A.H.; Hennig, H.F-K.O.; Otren, M.J. (1981). Relationship between oil pollution and psammolittoral meiofauna density of two South African beaches. Marine Environ. Res., Vol. 5, No. 1, pp. 59-77.

Fucik, K.W.; Bright, T.J.; Goodman, K.S. (1984). Measurements of damage, recovery, and rehabilitation of coral reefs exposed to oil. Restoration of Habitats Impacted by Oil Spills Symposium, Blacksburg, VA (USA), 9-11 Nov 1981. Cairns, J., Jr.; Buikema, A.L., (eds). Pages 115-134. Report Number: ISBN 0-250.40551-2.

Galbraith, D.M. (1978). Reclamation and Coal Exploration: Peace River Coal Block, British Columbia, Canada. Canada Dept of Mines & Petroleum Resources, British Columbia. Presented at Intl Congress for Energy & Ecosystem (Pergamon) Ecol & I Coal Resource Development Conf. Grand Forks, June 12-16, 78, V1 P444 (3).

Ganning, B.; Reish, D.J.; Strughan, D. (1984). Recovery and restoration of rocky shores, sandy beaches, tidal flats, and shallow subtidal bottoms impacted by oil spills. Restoration of Habitats Impacted by Oil Spills Symposium, Blacksburg, VA (USA), 9-11 Nov 1981. Cairns, J., Jr.; Buikema, A.L. eds. Pages 7-36. Report Number: ISBN 0-250-40551-2

Getter, C.D.; Cintron, G.; Dicks, B.; Lewis, R.R., III; Seneca, E.D. (1984). The recovery and restoration of salt marshes and mangroves following an oil spill. Restoration of Habitats Impacted by Oil Spills Symposium, Blacksburg, VA (USA), 9-11 Nov 1981. Cairns, J., Jr.; Buikema, A.L., eds. Pages 65-114. Report Number: ISBN 0-250-40551-2

Giroux, J.-F. (1981). Use of artificial islands by nesting waterfowl in southeastern Alberta. J. Wildl. Manage., Vol. 45, No. 3, pp. 669-679.

Glemarc, M.; Hussenot, E.; Moal, Y. Le (1982). Utilization of biological indications in hypertrophic sedimentary areas to describe dynamic process after the Amoco Cadiz oil spill. International Symposium on Utilization of Coastal Ecosystems: Planning, Pollution and Productivity, Rio Grande (Brazil), 22 Nov 1982. Fundacao Univ., Rio Grande (Brazil); Duke Univ. Mar. Lab., Beaufort NC (USA). Atlantica, Vol. 5, No. 2, p. 48. Special Issue. Summary only.

Gomoiu, M.T. (1983). Some ecological aspects of artificial reef construction along the coasts of north-western Black Sea. Journee d Etudes sur less Aspects Scientifiques Concernant les Recifs Artificiels et la Mariculture Suspendue, Cannes, France, 7 Decembre 1982. Pages 113-119. (Seminar on Scientific Aspects of Artificial Reefs and Floating Mariculture in the Mediterranean, Cannes, France, December 7, 1982).

Goodman, K.S.; Baker, J., editors, (1982). A preliminary ecological survey of the coastline of Abu Dhabi, United Arab Emirates. A report prepared for the Abu Dhabi Marine Operating Company (ADMA-OPCO) by BP International, Ltd., Environmental Control Centre, London. Volume 1. Text, tables and figures. Volume 2. Photographs. Publishers(s): British Petroleum International Ltd., London (UK). 178 pp.

Goodman, K.S.; Nunn, R.M. (1982). The littoral ecology of the area around Mongstad Refinery, Fensfjorden, Norway, 1981. An Interim Report to Rafinor A/S and Co. by BP International Limited. Publisher(s): BP International Ltd., Brittanic House, Moor Lane, London EC2Y 9BU, UK, 83 pp.

Gordon, W.G. (1981). Artificial reefs and the FCMA. Proceedings of a Conference on Artificial Reefs, Daytona Beach, FL (USA), September 13, 1979. Aska, D.Y., ed. Pages 75-77. Rep. Fla. Sea Grant Program. Report Number: FSG-R-41.

Gordon, W.G. (1986). NMFS and Army Corps of Engineers restore fisheries habitats: A cooperative venture. Fisheries, Sep-Oct 1986, V11, N5, P2(6).

Gore, J.A. editor. (1985). The restoration of rivers and streams: Theories and experience. Butterworth Publishers. Stoneham, MA (USA).

Gore, J.A.; Johnson, L.S. (1979). Biotic recovery of a reclaimed river channel after coal strip mining. Presented at the Mitigation Symposium: A National Workshop on Mitigating Losses of Fish and Wildlife Habitats, Fort Collins, CO (USA), July 16, 1979. Gen. Tech. Rep. US Dept. Agriculture, Fort Collins, CO (USA). P 239-244.

Gourbault, N.; Helleouet, M.N.; Naim, O.; Renaud-Mornant, J. (1980). Amoco Cadiz oil pollution. Contract COB-MUSEUM 79 5975. Effets de la pollution sur la meiofaune de Roscoff (greve de Roscoff chenal de la riviere de Morlaix). Deuxieme annee. Premiers resultats. [Research contract COB-MUSEUM 79/5975. Pollution effects on the meiofaune in Roscoff (Roscoff beach, Morlaix river channel). Preliminary results after two years study. 6 pp.]. Mus. Natl. Hist. Nat., Prog. Zool.-Vers, Paris, France. (Museum National d Histoire Naturelle Paris, France).

Grove, R.S. (1982). Artificial reefs as a resource management option for siting coastal power stations in southern California. Mar. Fish. Rev., Vol. 44, No. 6-7, pp. 24-27.

Grula, M.M.; Grula, E.A. (1983). Biodegradation of materials used in enhanced oil recovery. Final report, July 1, 1978, to November 30, 1981. Oklahoma State Univ., Stillwater, OK 74074, USA. NTIS, Springfield, VA (USA). Number: DE4002019.

Gudin, C.; Syratt, W.J. (1975). Biological aspects of land rehabilitation following hydrocarbon contamination. Env. Pollution, V8, N2, P107 (6).

Gumtz, G.D. (1972). Restoration of beaches contaminated by oil. United States Environmental Protection Agency. Environmental protection technology series, EPA-R2-72-045. NTIS Number: PB-214 419/4. 138 pp.

Gundlach, E.R.; Marchand, M. (eds.); Bodin, P.; Boucher, D. (1982) Mid-term evolution of meiobenthos and microphytobenthos on beaches touched by the Amoco Cadiz oil spill. Univ. Bretagne Occidentale, Lab. Oceanogr. Biol., 6 Ave Le Gorgeu, 29283 Brest Cedex, France. NOAA/CNEXO Joint Scientific Commission Workshops: Physical Chemical and Microbiological Studies after the Amoco Cadiz Oil Spill; Biological Studies after the Amoco Cadiz Oil Spill. Charleston, SC (USA), October 28, 1981; Brest (France) September 17, 1981. Ecological Study of the Amoco Cadiz Oil Spill: Report of the NOAA-CNEXO Joint Scientific Commission. pp 329-362. Joint NOAA/CNEXO Scientific Commission, Washington, DC (USA).

Gundlach, E.R.; Marchand, M. (eds.); Bodin, P.; Boucher, D. (1982). Natural recovery of salt-marsh vegetation destroyed by the Amoco Cadiz oil spill: Circumstances and tendencies. Lab. Bot. Gen., Campus Sci. Beaulieu, 35402-Rennes Cedex, France. NOAA/CNEXO Joint Scientific Commission Workshops: Physical, Chemical and Microbiological Studies after the Amoco Cadiz Oil Spill; Biological Studies after the Amoco Cadiz Oil Spill. Charleston, SC (USA), October 28, 1981; Brest (France) September 17, 1981. Ecological Study of the Amoco Cadiz Oil Spill: Report of the NOAA-CNEXO Joint Scientific Commission; pp 329-362. Joint NOAA/CNEXO Scientific Commission, Washington, DC (USA) Hampson, G.R.; Moul, E.T. (1978). No. 2 fuel oil spill in Bourne, Massachusetts: immediate assessment of the effects on marine invertebrates and a 3-year study of growth and recovery of a salt marsh. Presented at a Symposium on Recovery Potential of Oiled Marine Northern Environments, Halifax (Canada), October 10, 1977. J. Fish. Res. Board Can., 35(5), 731-744.

Hann, R.W., Jr. (1977). Fate of oil from the supertanker Metula. Presented at the Oil Spill Conference, New Orleans, LA (USA), March 8, 1977. Publisher(s): American Petroleum Inst., Washington, DC (USA). Pages 465-468. Report Number: API-Publ-4284

Hansen, K.; Vestergaard, P. (1986). Initial establishment of vegetation in a man-made coastal area in Denmark. Nord. J. Bot., Vol. 6, No. 4, pp. 479-495.

Herbes, S.E.; Southworth, G.R.; Shaeffer, D.L.; Griest, W.H.; Maskarinec, M.P. (1980). Critical Pathways of Polycyclic Aromatic Hydrocarbons in Aquatic Environments. The Scientific Basis of Toxicity Assessment, H. Witschi (ed.), Elsevier/North Holland Biomedical Press, pp. 113-126.

Horner, R.A. (1978). Beaufort Sea plankton studies. Seattle, WA, USA. In: Environmental assessment of the Alaskan continental shelf. Annual reports of principal investigators for the year ending March 1978. Volume 8, receptors—fish, littoral, benthos. P 85-142. Publisher(s): US Environmental Research Laboratories, Boulder, CO. Outer Continental Shelf Enviornmental Assessment Program.

Hueckel, G.J.; Buckley, R.M. (1986). The mitigation potential of artificial reefs in Puget Sound, Washington. Oceans 86 Conference Record: Science-Engineering-Adventure, Vol. 2. Data Management, Instrumentation and Economics, Washington, DC (USA), 23-25 Sep 1986, pp. 542-548. Oceans 86. Report Number: IEEE-86CH2363-0.

Hunt, L.J. (1979). Use of dreged material disposal in mitigation. Presented at the

Mitigation Symposium: A National Workshop on Mitigating Losses of Fish and Wildlife Habitats. Fort Collins, CO (USA). 16 July 1979. US Army Corps of Engineers, Waterways Exp. Stn., Vicksburg, MS, USA. Gen. Tech. Rep. US Dept Agric. US Dept. Agriculture Fort Collins, CO (USA). Report Number: p 502–507.

Ibanez, F.; Dauvin, J.-C. (1988). Long-term changes (1977 to 1987) in a muddy fine sand Abra alba—Melinna palmata community from the western English Channel: Multivariate time-series analysis. Mar. Ecol. (Prog. Ser.) Vol. 49, No. 1–2, pp. 65–81.

Jackson, J.B.C.; et al. (1989). Ecological Effects of a Major Oil Spill on Panamanian Coastal Marine Communities. Science, Vol. 243, pp. 37–44.

Jacobs, R.P.W.M. (1980). Effects of the Amoco Cadiz oil spill on the seagrass community at Roscoff with special reference to the benthic infauna. MarLow chronic additions of no. 2 fuel oil: Chemical behavior, biological impact and recovery in a simulated estuarine environment. Mar. Ecol. (prog. Ser.)., Vol. 9, No. 2, pp. 121–136.

Jennings, A.L. (1972). Spill damage restoration. Natl Conf Hazardous Material Spill Houston Mar 21–23, 1972, P221 (3).

Johnson, L.A. (1981). Revegetation and selected terrain disturbances along the Trans-Alaska Pipeline, 1975–1978. Cold Regions Research and Engineering Lab., Hanover, NH (USA), 122 pp. NTIS Number: AD–A138 426/2.

Jones, L.E.; Hunter, R.A. (1981). Strategies for rehabilitation and enhancement of coastal sites for waterfowl. 6th Biennial International Estuarine Research Conference, Gleneden Beach, OR (USA), 1–5 Nov 1981. Estuaries, Vol. 4, No. 3, p. 266. Summary only.

Kelley, K. (1988). Seagrass replanting efforts may improve fisheries. Natl. Fishermen, Vol. 68, No. 11, pp. 14–16.

Kentula, M.E. (1986). Wetland rehabilitation and creation in the Pacific Northwest. Ecol. Res. Ser., U.S. Environ. Prot. Agency, 29 pp. NTIS Number: PB86–241023/GAR. Report Number: EPA/600/D–86/183.

Krahn, Margaret M.; et al. (1986). Associations Between Metabolites of Aromatic Compounds in Bile and the Occurrence of Hepatic Lesions in English Sole (Parophrys vetulus) from Puget Sound, Washington. Arch. Environ. Contam. Toxicol Vol. 15, pp. 61–67.

Lauren, D.J.; Rice, S. (1985). Significance of Active and Passive Depuration in the Clearance of Naphthalene from the Tissues of Hemigrapsus nudus (Crustacea: Decapoda). Marine Biology, Vol. 88, pp. 135–142.

Levasseur, J.; Durand, M.-A.; Jory, M.-L. (1981). Biomorphologic and floristic aspects of the reconstitution of a phanerogamic vegetal cover, altered by the Amoco Cadiz oil spill and the following clean-up operations: Special study of the Ile-Grande Salt Marshes (Cotes du Nord). Amoco Cadiz: Fates and Effects of the Oil Spill. Proceedings of the International Symposium. Centre Oceanologique de Bretagne, Brest (France). November 19–22, 1979, pp. 455–473. Report Number: ISBN 2–90272–09–9.

Little, A.E. (1983). A resurvey of rocky shore transects in Milford Haven, January–April 1979: Comparisons with data collected from 1961–1978. Publisher(s): Oil Pollution Research Unit, Pembroke (UK), 1983. 241 pp., published in 2 volumes. Report Number: FSC(OPRU)/6/83.

Lum, A.L. (1978). Shorebird fauna changes of a small tropical estuary following habitat alteration: Biological and political impacts of environmental restoration. Environmental Management 2(5):423–430.

Malero, D.J.; Castle, R.W.; Crain, O.L. (1978). Protection, cleanup and restoration of salt marshes endangered by oil spills: A procedural manual. United Research Services, San Mateo, CA (USA). Contract No. EPA–68–03–2160.

Malins, D.C.; et al. (1987). Field and Laboratory Studies of the Etiology of Liver Neoplasms in Marine Fish from Puget Sound. Environmental Health Perspectives, Vol. 71, pp. 5–16.

Maynard, Desmond J.; Weber, Douglas D. (1981). Avoidance Reactions of Juvenile Coho Salmon (Oncorhynchus kisutch) to Monocyclic Aromatics. Can. J. Fish. Aquat. Sci., Vol. 38, pp. 772–778.

Melzian, Brian D.; Lake, James. (1986/87). Accumulation and Retention of No. 2 Fuel Oil Compounds in the Blue Crab, Callinectes sapidus Rathbun. Oil & Chemical Pollution, Vol. 3, No. 5, p. 367.

Motohiro, T. (1983). Tainted Fish Caused by Petroleum Compounds—A Review. Wat. Sci. Tech. (Finland), Vol. 15, pp. 75–83.

Mann, K.H. (1978). A biologist looks at oil in the sea. Shore And Beach 46(4):27–29.

Mann, K.H.; Clark, R.B. (1977). Session 3. Summary and overview: Long-term effects of oil spills on marine intertidal communities. Presented at the Symposium on Recovery Potential of Oiled Marine Northern Environments, Halifax (Canada), 10 Oct 1977. J. Fish. Res. Board Can. 35(5): 791–795.

McGill, W.B. (1977). Soil restoration following oil spils—A review. J. Can. Pet. Technol., 16(2), 60–67.

Meade, N.F. (1981). The Amoco Cadiz oil spill: An analysis of emergency response clean-up and environmental rehabilitation costs. Presented at OECD Cost of Oil Spills Conf, France, Jun 16–18, 81, P130 (18).

Michelson, P.G.; Schamel, D.; Tracy, Ionson, A. (1977). Avian community ecology at two sites on Espenberg Peninsula in Kotzebue Sound, Alaska. In: Environmental assessment of the Alaskan continental shelf. Volume 5. receptors—birds. U.S. National Oceanic and Atmospheric Administration, Boulder, CO. Environmental Research Laboratories, Mar 1977, P. 1–74. Contract No. 3–5–22–56. Report Number: NOAA/ERL–AR–77–5

Mozley, S.C.; Butler, M.G. (1978). Arctic effects of crude oil on aquatic insects of tundra ponds. Presented at the Workshop on Ecological Effects of Hydrocarbon Spills in Alaska, Woods Hole, MA (USA), 6 Apr 1978.

Nakatani, R.E.; et al. (1985). Effect of Prudhoe Bay Crude Oil on the Homing of Coho Salmon in Marine Waters. Health and Environmental Sciences Department API Publication No. 4411, American Petroleum Institute, Washington, D.C.

Neff, Jerry M. (1985). Use of Biochemical Measurements to Detect Pollutant-Mediated Damage to Fish. Aquatic Toxicology and Hazard Assessment: Seventh Symposium, ASTM STP 854, pp. 155–183.

Niedzialkowski, D.M.; Kerr, R.L. (1988). Wetlands mitigation banking: Planning for protection of environmental values. Proceedings of the Symposium on Coastal Water Resources Wilmington, NC (USA). Lyke, W.L.; Hoban, T.J., eds. Tech. Publ. Ser. Am. Water Resour. Assoc. Pages 789–790. Report Number: TPS–88–1

Niesen, T.M.; Lyke, E.B. (1981). Pioneer infaunal communities in the Hayward Salt Marsh restoration (San Francisco Bay). 6th Biennial International Estuarine Research Conference, Gleneden Beach, OR (USA), 1–5 Nov 1981. Estuaries, Vol. 4, No. 3, p. 243. Summary only.

Niewolak, S. (1978). Microbiological aspects of restoration of cultivated soils contaminated with crude oil. Wiad Ekol 24(2): 109–118.

OBrien, P.Y.; Dixons, P.S. (1976). The effects of oils and oil components on algae a review. Br. Phycol. J. 11(2): 115–142.

Owens, E.H.; Rashid, M.A. (1976). Coastal environments and oil spill residues in Chedabucto Bay Nova Scotia Canada. Can. J. Earth. Sci. 13(7): 908–928.

Owens, E.H.; Robillard, G.A. (1981). Spill impacts and shoreline cleanup operations on Arctic and sub-Arctic coasts. Presented at EPA/API/USCG 1981 Oil Spill Conf, Atlanta, Mar 2–5, 81, P305 (5).

Pacific Northwest Laboratory. (1986). Reconnaissance Survey of Eight Bays in Puget Sound. Final Reports, Volume I and II. Prepared for U.S. Environmental Protection Agency Region 10, Seattle WA, by Battelle, Marine Research Laboratory, Sequin, WA.

Palmer, H.V.R., Jr. (1972). Falmouths oiled shellfish beds being restored. National Fisherman 53(4): C10, Aug, 1972

Pasquet, R. (1981). Effectiveness and Cost of Onshore Techniques to Control the Accidental Pollution of the Sea by Oil. Cedre, France. Presented at OECD Cost of Oil Spills Conf, France, June 16–18, 81, P112 (18). The original document is available from Bowker.

Pearson, Walter H.; et al. (1980). Detection of Petroleum Hydrocarbons by the Dungeness Crab, Cancer Magister. Fishery Bulletin, Vol. 78, No. 3, pp. 821–826.

Perna, A.J.; Wayne, T.J. (1970). Effects, recovery, reuse of oil from aqueous environments. Conf at Univ of Rhode Island, Jul 21–23, 70 P232 (12)

Petersen, J.A. (1984). Establishment of mussel beds: Attachment behavior and distribution of recently settled mussels (Mytilus californianus). Veliger, Vol. 27, No. 1, pp. 7–13.

Petty, S.E.; et al. (1982). Assessment of Synfuel Spill Cleanup Options. PNL–4244. Pacific Northwest Laboratory Operated for the U.S. Department of Energy by Battelle Memorial Institute, Richland, WA.

Phillips, R.C. (1980). Transplanting methods. In: Handbook of seagrass biology: An ecosystem perspective. Phillips, R.C.;

McRoy, C.P., eds. p 41–56. Publisher(s): Garland STPM New York, NY (USA)

Prince, E.D.; Maughan, O.E. (1978). Freshwater artificial reefs: biology and economics. Fisheries, 3(1), 5–9.

Prince, E.D.; Maughan, O.E.; Prouha, P. (1977). How to build a freshwater artificial reef. Sea Grant Rep. Va. Polytechnic Inst. Publisher(s): VPI, Blacksburg, VA (USA), 2nd ed. 17p. Report Number: VPI–SG–77–02

Proskurenko, I.V. (1977). The Planning of technical facilities in mariculture. In: Proceedings of the Fifth Japan-Soviet Joint Symposium on Aquaculture, September 1976, Tokyo and Sapporo, Japan. Motoda, S., (ed.). Presented at the 5th Japan-Soviet Joint Symposium on Aquaculture, Tokyo (Japan), 14 Sept. 1976; Sapporo (Japan), 15 Sept. 1976. Pac. Res. Inst. Fish. Oceanogr. (TINRO), 20, Lenin St. Vladivostok, USSR. Publisher(s): Tokai University, Tokyo (Japan), March 1977, p. 297–304

Race, M.S. (1985). Critique of present wetlands mitigation policies in the United States based on an analysis of past restoration projects in San Francisco Bay. Environ. Manage., Vol. 9, No. 1, pp. 71–82.

Race, M.S. (1986). Wetlands restoration and mitigation policies: Reply. Environ. Manage., Vol. 10, No. 5, pp. 571–572.

Radvanyi, A. (1980). Control of small mammal damage in the Alberta Canada oil Sands Reclamation and AF Forestation Program. For Sci 26 (4):687–702.

Range, J.D.; Feller, M.A. (1979?). Congressional Perspectives on the Need for Estimating Environmental Damage from Oil and Hazardous Waste Spills. Presented at U.S. Fish & Wildlife Service Pollution Response Conference, St. Petersburg, May 8–10, 79, P157 (5). The original document is available from Bowker.

Rauta, C.; Zarioiu, V.; Creanga, I.; Petre, N.; Kaszoni, E.; Carstea, S.; Mihalache, G. (1987). Preliminary research concerning the technology for bringing under agricultural use some soils polluted with petroleum residues. An Inst Cercet Pedol Agrochim 47(0):211–220.

Renaud-Mornant, J.; Gourbault, N. (1980). Survival of meiofauna after the Amoco Cadiz oil spill (Morlaix Channel and Roscoff Beach, Brittany, France). Bull. Mus. Natl. Nat. (France) (4E Ser.) (A Zool. Biol. Ecol. Anim.), Vol. 2, No. 3, p. 759–772.

Rice, S.D.; Korn, S.; Karinen, J.F. (1979). Lethal and sublethal effects on selected Alaskan marine species after acute and long-term exposure to oil and oil components. In: Environmental assessment of the Alaskan continental shelf. Annual reports of principal investigators for the year ending March 1979, Volume 6, effects. p. 27–59. Publisher(s): NOAA Environmental Research Labs, Boulder, CO (USA), Outer Continental Shelf Environmental Assessment Program.

Riley, R.G.; et al. (1980/81). Changes in the Volatile Hydrocarbon Content of Prudehoe Bay Crude Oil Treated Under Different Simulated Weathering Conditions. Marine Environmental Research, Vol. 4, pp. 109–119.

Roubal, William T.; et al. (1977). Accumulation and Metabolism of Carbon-14 Labeled Benzene, Naphthalene, and Anthracene by Young Coho Salmon (Oncorhynchus Kisutch). Archives of Environmental Contamination and Toxicology, Vol. 5, pp. 513–529.

Samuels, W.B.; Lanfear, K.J. (1982). Simulations of seabird damage and recovery from oilspills in the northern Gulf of Alaska. J Env Management, Sept. 82, V15, N2, P169 (14).

Schiegg, H.O. (1980). Field Infiltration as a Method for the Disposal of Oil in Water Emulsions from the Restoration of Oil Polluted Aquifers. Electrowatt Eng. Serv., Ltd., CH–8022 Zurich, Switzerland. Water Res 14 (8). 1011–1016. CODEN: WATRA

Schwendinger, R.B. (1968). Reclamation of Soil Contaminated with Oil. Journal of the Institute of Petroleum, Vol. 54, No. 535, pp. 182–197.

Seaman, W., Jr.; Aska, D.Y. (1986). The Florida reef network: Strategies to enhance user benefits. Artificial Reefs—Marine and Freshwater Applications. D. Itri, F.M., ed. Pages 545–561. Report Number: ISBN 0–87371–010–X

Seneca, E.D.; Broome, S.W. (1982). Restoration of marsh vegetation impacted by the Amoco Cadiz oil spill and subsequent cleanup operations at Ile Grande, France. NOAA/CNEXO Joint Scientific Commission Workshops: Physical, Chemical, and Microbiological Studies after the Amoco Cadiz Oil Spill, Biological Studies after the Amoco Cadiz Oil Spill, Charleston, SC (USA). Brest (France) 17 Sept. 1981. 28 Oct. 1981. Ecological Study of the Amoco Cadiz Oil Spill: Report of the NOAA-CNEXO Joint Scientific Commission. Gundlanch, E.R.; Marchand, M., eds. Pages 363–420.

Shaw, D.G.; Cheek, L.M.; Paul, A.J. (1977). Uptake and Release of Petroleum by Intertidal Sediments at Port Valdez, Alaska. Estuarine and Coastal Marine Science, Vol. 5, pp. 109–119.

Sheehy, D.J. (1979). Fisheries Development: Japan. Water Spectrum., Vol. 12, No. 1, pp. 1–8.

Sheehy, D.J. (1986). New approaches in artificial reef design and applications. Artificial Reefs—Marine and Freshwater Applications. D Itri, F.M., (ed.). Pages 253–263. Report Number: ISBN 0–87371–010–X

Shilova, I.I. (1977). Primary plant successions on technogenic sand outcrops in oil and gas producing regions in the Centra Ob Valley. Acad. of Sciences USSR, Ural Scientific Centre, Inst. of Plant and Animal Ecology, Ulitsa Pervomaiskaya 91, Sverdlovsk, Nauka, USSR. Soviet Journal of Ecology 8(6), 475–482. Coden: SJECAH. Illus. refs. (Some in Czech; Russ.)

Skalski, John R.; McKenzie, Daniel H. (1982) A Design for Aquatic Monitoring Programs. Journal of Environmental Management, Vol. 14, pp. 237–251.

Southward, A.J. (1982). An ecologist's view of the implications of the observed physiological and biochemical effects of petroleum compounds on marine organisms and ecosystems. The Long-Term Effects of Oil Pollution on Marine Populations, Communities and Ecosystems. London (UK), 28–29 Oct. 1981. Philos. Trans. R. Soc. Lond. Ser. B., Vol. 297, No. 1087, pp. 241–255.

Southward, A.J.; Southward, E.C. (1978). Recolonization of rocky shores in Cornwall after use of toxic dispersants to clean up the Torrey Canyon spill. Presented at the Symposium on Recovery Potential of Oiled Marine Northern Environments, Halifax (Canada), 10 Oct. 1977. J. Fish. Res. Bonrd Can. 35(5):682–706.

Spaulding, Malcolm L.; et al. (1985). Oil Spill Fishery Impact Assessment Model: Sensitivity to Spill Location and Timing. Estuarine, Coastal and Shelf Science, Vol. 20, pp. 41–53.

Stevenson, J.C. (1978). Recovery potential of oiled marine northern environments: Symposium papers. Journal of the Fisheries Research Board of Canada 35(5):499–795.

Stikney, R.R.; Dodd, J.D. (1979). Artificial propagation of a salt marsh. Sea Front., 25(3), 173–179.

Strand, John A. III; Vaughan, B.E. (1981). Ecological Fate and Effects of Solvent Refined Coal (SRC) Materials: A Status Report. Pacific Northwest Laboratory Operated for the U.S. Department of Energy by Battelle Memorial Institute, Richland, WA.

Swift, W.H.; Touhill, C.J.; Haney, W.A.; Nakatani, R.E.; Peterson, P.L. (1969). Review of Santa Barbara Channel oil pollution incident. (Water pollution control research series.) Report No.: USCG–794102/003 or FWPCA–15080–EAG–07/69; W70–06320. 165 p. Also available as Water Pollution Control Research Series DAST–20. NTIS Number: AD–726 156 or PB–191 712. Contract No.: FWPCA–14–12–530 or DI–14–12–530.

Swift, W.H.; Touhill, C.J.; Templeton, W.L.; Roseman, D.P. (1969). Oil Spillage Prevention Control and Restoration State of the Art and Research Needs Water Pollution. J Water Pollut Contr Fed 41 (3 PT. 1). 392–412. CODEN: JWPFA.

Sylva, D.P. de (1982). Potential for increasing artisanal fisheries production from floating artificial habitats in the Caribbean. Proceedings of the 34th Annual Gulf and Caribbean Fisheries Institute, Mayaguez, PR (USA), Nov. 1981. No. 34., pp. 156–167.

Szaro, Robert C. (1979). Bunker C Fuel Oil Reduces Mallard Egg Hatchability. Bull. Environm. Contam. Toxicol., Vol. 22, pp. 731–732.

Thayer, G.W.; Fonseca, M.S.; Kenworthy, W.J. (1982). Restoration and enhancement of seagrass meadows for maintenance of nearshore productivity. International Symposium on Utilization of Coastal Ecosystems: Planning, Pollution and Productivity, Rio Grande (Brazil, 22 Nov. 1982. Fundacao Univ. Rio Grande (Brazil) Duke Univ. Mar. Lab., Beaufort, NC (USA). Atlantica, Vol. 5, No. 2, pp. 118–119. Special issue. Summary only.

Thomas, M.L.H. (1977). Long-term biological effects of Bunker C oil in the intertidal zone. In: Fate and effects of petroleum hydrocarbons in marine ecosystems and organisms: Proceedings of a symposium held at the Olympic Hotel, Seattle, WA (USA) on 10–12 Nov. 1976. Wolfe, D.A. (ed.). Pergamon, New York, NY (USA), 1977, pp. 238–246. Report Number: ISBN 0–08–021613–7.

Thomas, Robert E.; Rice, Stanley D. (1981). Excretion of Aromatic Hydrocarbons and Their Metabolites by Freshwater and Seawater Dolly Varden Char. Biological Monitoring of Marine Polluants. Academic Press, pp. 425–448.

Thorhaug, A. (1979). Mitigation of estuarine fisheries nurseries: seagrass restoration. Presented at the Mitigation Symposium: A National Workshop on Mitigating Losses of Fish and Wildlife Habitats, Fort Collins, CO (USA), 16 Jul. 1979. Gen. Tech. Rep. U.S. Dept. Agriculture, Fort Collins, CO (USA), pp. 667–669.

Thorhaug, A. (1980). Restoration of seagrass communities: Strategies for lessening man's impact on nearshore marine resources. Tropical Ecology and Development. Proceedings of the 5th International Symposium of Tropical Ecology, 16–21 April 1979, Kuala Lumpur, Malaysia. Part 2. Furtado, J.I., ed. Pages 1199–1206.

Thorhaug, A.; Miller, B.; Jupp, B.; Bookers, F. (1985). Effects of a variety of impacts on seagrass restoration in Jamaica. Mar. Pollut. Bull., Vol. 16, No. 9, pp. 355–360.

Tyler, J. (1981). Materials placement procedures—surface to bottom transfer. Artificial Reefs: Proceedings of a Conference held September 13–15, 1979, in Daytona Beach, FL. Aska, D.Y., ed. Rep. Fla. Sea Grant Program. Pages 106–109. Report Number: FSG–R–41.

URS Research Co., San Mateo, CA (1970). Evaluation of Selected Earthmoving Equipment for the Restoration of Oil-Contaminated Beaches. Water pollution control research series, 29 Aug. 69–1 Jul. 70. Corp. Source Codes: 405800. Report No.: W72–04296; EPA–15080–EOS–10/70. 174p Contract No.: EPA–15080–EOS.

URS Research Co., San Mateo, CA. (1970). Preliminary Operations Planning Manual for the Restoration of Oil-Contaminated Beaches. Water pollution control research series. Corp. Source Codes: 405800. Report No.: W70–06319; FWPCA–15080–EOS–3/70. 76p. Contract No.: DI–14–12–811.

Vanderhorst, J.R.; Blaylock, J.W.; Wilkinson, P.; Wilkinson, M.; Fellingham, G. (1980). Recovery of Strait of Juan de Fuca intertidal habitat following experimental contamination with oil. NTIS, Springfield, VA, Number: PB81–112518. Vandermeulen, J.H. (1977). The Chedabucto Bay Spill—Arrow, 1970. Oceanus 20(4):31–39.

Vandermeulen, J.H. (1978). Introduction to the Symposium on Recovery Potential of Oiled Marine Northern Environments. Presented at the Symposium on Recovery Potential of Oiled Marine Northern Environments, Halifax (Canada), 10 Oct. 1977. Dept. Fish. Environ., Fish. Mar. Serv., Mar. Ecol. Lab., Bedford Inst. Oceanogr., Dartmouth, NS B2Y 4As, Canada, 35(5), 505–508. 1978. Special issue of selected papers presented at symposium on Recovery Potential of Oiled Marine Northern Environments. J. Fish Res. Board Can.

Vanlooke, R.; Berlinde, A.M.; Berstraete, W.; de Borger, R. (1979). Microbial Release of Oil from Soil Columns. Univ. Ghent, Coupure 533, 9000 Ghent, Belgium. Eviron Sci Technol 13 (3). 346–348. CODEN: ESTHA.

Ward, D.M.; Winfrey, M.R.; Beck, E.; Boehm, P. (1982). Amoco Cadiz pollutants in anaerobic sediments: Fate and effects on anaerobic processes. NOAA/CNEXO Joint Scientific Commission Workshops: Physical, Chemical, and Microbiological Studies after the Amoco Cadiz Oil Spill Biological Studies after the Amoco Oil Spill, Charleston, SC (USA). Brest (France) 17 Sep 1981. 28 Oct 1981. Ecological Study of the Amoco Cadiz Oil Spill: Report of the NOAA-CNEXO Joint Scientific Commission. Gundlach, E.R., Marchand, M., (eds.) Pages 159–190.

Whipple, J.A.; Eldridge, M.B.; Benville, P. Jr. (1981) An Ecological Perspective of the Effects of Monocyclic Aromatic Hydrocarbons on Fishes. Biological Monitoring of Marine Pollutants, Academic Press, pp. 483–551.

White, Donald H.; King, K.A.; Coon, N.C. (1979) Effects of No. 2 Fuel Oil on Hatchability of Marine and Estuarine Bird Eggs. Bull Environm. Contam. Toxicol., Vol. 21, pp. 7–10.

Wilcox, C.G. (1986). Comparison of shorebird and waterfowl densities on restored and natural intertidal mudflats at Upper Newport Bay, California, USA. Colonial Waterbirds, Vol. 9, No. 2, pp. 218–226.

Wilson, T.C.; Krenn, S.J. (1986). Construction and evaluation of an artificial reef designed to enhance nearshore rockfish production. Oceans 86 Conference Record: Science-Engineering-Adventure, Washington, DC (USA), 23–25 Sep 1986. Vol. 2. Data Management, Instrumentation and Economics, pp. 547–551. Report Number: IEEE–86CH2363–0.

Word, J.Q.; et al. (1987). Reconnaissance of Petroleum Contamination from the ARCO Anchorage Oil Spill at Port Angeles, Washington, and its Influence on Selected Areas of the Strait of Juan De Fuca. Prepared by ARCO Marine, Inc. by Battelle, Pacific Northwest Laboratories, Richland, WA.

Word, J.Q.; et al. (1987). Effectiveness of Cleaning Oiled Beach Sediments at Ediz Hook Following the ARCO Anchorage Oil Spill. Prepared for ARCO Marine Inc. by Battelle, Pacific Northwest Laboratories, Richland, WA.

Zentner, J. (1985). Wetland restoration in coastal California: A decade of management lessons. 8th Biennial International Estuarine Research Conference, Durham, NH (USA), 28 Jul 1985. Estuaries, Vol. 8, No. 2B, p. 30A.

Zieman, J.C.; Orth, R.A.; Phillips, R.C.; Thayer, G.; Thorhaug, A. (1984). The effects of oil on seagrass ecosystems. Restoration of Habitats Impacted by Oil Spills Symposium, Blacksburg, VA (USA), 9–11 Nov 1981. Restoration of Habitats Impacted by Oil Spills. Cairns, J., Jr., Buikema, A.L.; eds. Pages 37–64. Report Number: ISBN 0–250–40551–2.

Appendix B

Item 1: "Ecological Restoration of PWS and the GOA: An Annotated Bibliography of Relevant Literature." RPWG and EPA-ORD, March 1990.

Item 2: "Restoration Following the Exxon Valdez Oil Spill: Proceedings the Public Symposium." Prepared by the RPWG, July 1990.

Item 3: "Restoration Following the Exxon Valdez Oil Spill: August 1990 Progress Report." Prepared by the RPWG, August 1990.

Item 4: "State/Federal Natural Resource Damage Assessment Plan for the Exxon Valdez Oil Spill—Sept. 1990." Trustee Council.

Item 5: "State/Federal Natural Resource Damage Assessment Plan for the Exxon Valdez Oil Spill—Aug. 1989." Trustee Council.

[FR Doc. 90–27196 Filed 11–16–90; 8:45 am]

BILLING CODE 6560–50–M

FEDERAL RESERVE SYSTEM

Central Bancshares of the South, Inc., et al.; Acquisitions of Companies Engaged in Permissible Nonbanking Activities

The organizations listed in this notice have applied under § 225.23 (a)(2) or (f) of the Board's Regulation Y (12 CFR 225.23 (a)(2) or (f)) for the Board's approval under section 4(c)(8) of the Bank Holding Company Act (12 U.S.C. § 1843(c)(8)) and § 225.21(a) of Regulation Y (12 CFR 225.21(a)) to acquire or control voting securities or assets of a company engaged in a nonbanking activity that is listed in § 225.25 of Regulation Y as closely related to banking and permissible for bank holding companies. Unless otherwise noted, such activities will be conducted throughout the United States.

Each application is available for immediate inspection at the Federal Reserve Bank indicated. Once the application has been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the question whether consummation of the proposal can "reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." Any request for a hearing on this question must be accompanied by a statement of the reasons a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute, summarizing the evidence that would be presented at a hearing, and indicating how the party commenting would be aggrieved by approval of the proposal.

Unless otherwise noted, comments regarding each of these applications