

STATEMENT
OF
GARRETT E. BROWN, JR.
ACTING DEPUTY MARITIME ADMINISTRATOR
ON
BEHALF OF
THE
MARITIME ADMINISTRATION
DEPARTMENT OF TRANSPORTATION
BEFORE THE
SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE SENATE COMMITTEE
ON ENVIRONMENT AND PUBLIC WORKS
ON ISSUES CONCERNING THE INCINERATION OF
HAZARDOUS WASTE AT SEA

JULY 17, 1985

STATEMENT OF GARRETT E. BROWN, JR., ACTING DEPUTY MARITIME
ADMINISTRATOR, MARITIME ADMINISTRATION, DEPARTMENT OF
TRANSPORTATION, BEFORE THE SUBCOMMITTEE ON ENVIRONMENTAL POLLUTION
OF THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS ON ISSUES
CONCERNING THE INCINERATION OF HAZARDOUS WASTE AT SEA.

JULY 17, 1985

Mr. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE. MY NAME IS GARRETT E. BROWN, JR., AND I AM THE ACTING DEPUTY MARITIME ADMINISTRATOR OF THE MARITIME ADMINISTRATION. I APPRECIATE THE OPPORTUNITY TO APPEAR AT THIS OVERSIGHT HEARING. THE U.S. COAST GUARD OF THE DEPARTMENT IS ALSO REPRESENTED THIS MORNING, AND WILL PRESENT A SEPARATE STATEMENT.

THE MARITIME ADMINISTRATION'S (MARAD) DIRECT INTEREST IN THE INCINERATION OF HAZARDOUS WASTES AT SEA IS IN THE CONTEXT OF SHIPBUILDING OPPORTUNITIES AND THE DEVELOPMENT OF THE U.S. MERCHANT MARINE. THE ENVIRONMENTAL PROTECTION AGENCY (EPA), THROUGH THE DESIGNATION OF BURN SITES AND SETTING STANDARDS FOR THE ACTUAL INCINERATION, HAS THE MAJOR RESPONSIBILITY FOR THE INCINERATION OF HAZARDOUS WASTE AT SEA. WITHIN THE DEPARTMENT, THE U.S. COAST GUARD IS RESPONSIBLE FOR THE REGULATION OF THE DESIGN, CONSTRUCTION AND SAFE OPERATION OF ALL VESSELS BOTH AT SEA AND IN PORT.

REGULATORY RESPONSIBILITY FOR PROTECTING LIFE AND PROPERTY FROM THE RISKS ASSOCIATED WITH THE LAND BASED TRANSPORTATION OF HAZARDOUS MATERIALS AND HAZARDOUS WASTES IS VESTED IN SEVERAL OPERATING ADMINISTRATIONS OF THE DEPARTMENT OF TRANSPORTATION. THE RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION, WITH TECHNICAL

ASSISTANCE FROM THE OTHER OPERATING ADMINISTRATIONS, MAINTAINS A COMPREHENSIVE SET OF STANDARDS GOVERNING THE DESIGN, CONSTRUCTION, MAINTENANCE AND OPERATION OF TRUCKS TRAILERS, RAIL TANK CARS AND VARIOUS PORTABLE CONTAINERS USED BY ALL MODES OF TRANSPORTATION FOR TRANSPORTING WASTE AND ALL OTHER CATEGORIES OF HAZARDOUS MATERIALS. THE FIELD INSPECTION FORCES OF THE COAST GUARD AND OTHER ADMINISTRATIONS CARRY OUT COORDINATED MONITORING AND INSPECTION EFFORTS TO ASSURE COMPLIANCE WITH THOSE STANDARDS.

MARAD BECAME INVOLVED IN THE SUBJECT OF OCEAN INCINERATION IN THE MID-1970'S, WHEN MARAD AND EPA CONDUCTED A NUMBER OF STUDIES CONCERNING TECHNICAL, ENVIRONMENTAL, SAFETY AND ECONOMIC ISSUES OF INCINERATING HAZARDOUS WASTES AT SEA. DURING THIS PERIOD, THE 1978/79 INTERNATIONAL STANDARDS FOR INCINERATION AT SEA WERE DEVELOPED AND APPROVED UNDER THE AUSPICES OF THE INTERNATIONAL MARITIME ORGANIZATION. EPA HELPED DEVELOP THESE STANDARDS, AND MARAD ASSISTED EPA ON TECHNICAL MATTERS.

INCREASING INTEREST IN OCEAN INCINERATION RESULTED FROM THE EVER-RISING ACCUMULATION OF HAZARDOUS WASTES IN THE UNITED STATES. BY 1980, 57 MILLION METRIC TONS OF INDUSTRIAL HAZARDOUS WASTES WERE PRODUCED (ACCORDING TO EPA).

THE SERIOUS ENVIRONMENTAL AND PUBLIC HEALTH PROBLEMS ASSOCIATED WITH DISPOSAL SITES PROMPTED FEDERAL AGENCIES TO STEP-UP EFFORTS TO EXAMINE TECHNOLOGIES FOR TREATMENT AND DESTRUCTION OF WASTE MATERIALS. HIGH TEMPERATURE INCINERATION WAS FOUND TO BE THE MOST EFFECTIVE WAY TO DESTROY COMBUSTIBLE HAZARDOUS WASTES.

IN FEBRUARY 1980 AN INTERAGENCY WORK GROUP CONSISTING OF REPRESENTATIVES OF EPA, MARAD, COAST GUARD AND THE NATIONAL BUREAU OF STANDARDS UNDERTOOK A STUDY OF OCEAN INCINERATION AND THE ALTERNATIVES AVAILABLE TO THE FEDERAL GOVERNMENT FOR ENCOURAGING THE DESIGN, CONSTRUCTION, AND OPERATION OF U.S.-FLAG INCINERATOR SHIPS. THE WORK GROUP EXAMINED PREVIOUS INCINERATION OPERATIONS, VARIOUS FEDERAL ASSISTANCE PROGRAMS, SAFETY AND CONTROL MEASURES INCINERATOR SHIP CONCEPTUAL DESIGNS, ENVIRONMENTAL IMPACTS, AND WATERFRONT FACILITIES. IN SEPTEMBER 1980, THE WORK GROUP ISSUED ITS REPORT AND CONCLUDED THAT CHEMICAL WASTE INCINERATION AT SEA, ABOARD SPECIALLY DESIGNED AND EQUIPPED SHIPS, IS "AN EFFECTIVE AND ENVIRONMENTALLY ACCEPTABLE TECHNOLOGY" FOR DESTROYING COMBUSTIBLE LIQUID HAZARDOUS CHEMICAL WASTES. IT FURTHER CONCLUDED THAT AN ACCELERATED AND COORDINATED FEDERAL EFFORT SHOULD BE INSTITUTED TO ESTABLISH CHEMICAL WASTE INCINERATOR SHIP CAPABILITIES IN THE UNITED STATES.

BY MEMORANDUM OF OCTOBER 8, 1980, THE ADMINISTRATOR OF EPA AND THE ASSISTANT SECRETARY OF COMMERCE FOR MARITIME AFFAIRS NOTED THE SERIOUS ENVIRONMENTAL AND PUBLIC HEALTH PROBLEMS ASSOCIATED WITH ON LAND STORAGE OF TOXIC CHEMICAL WASTES. THEY APPROVED THE RECOMMENDATION ISSUED BY THE WORK GROUP, WITH THE COMMENT. AMONG OTHERS, THAT STRONG EMPHASIS SHALL BE PLACED ON UTILIZATION OF PRIVATELY-OWNED U.S.-FLAG INCINERATOR SHIPS.

AS A RESULT OF THE OCTOBER, 1980, AGREEMENT BETWEEN MARAD AND EPA, THE WORK GROUP WAS EXPANDED AND REDESIGNATED THE INTERAGENCY REVIEW BOARD FOR THE CHEMICAL WASTE INCINERATOR SHIP PROGRAM (IRB).

THE PURPOSE OF THIS BOARD WAS TO MONITOR AND COORDINATE FEDERAL GOVERNMENT ACTIVITIES RELATED TO DEVELOPING U.S.-FLAG INCINERATOR SHIP CAPABILITIES IN THE UNITED STATES. MARAD'S CHIEF INTEREST IN THE WORK OF THIS BOARD AND IN THIS SUBJECT OVERALL WAS TO ENCOURAGE THE CONSTRUCTION OF THE MOST SUITABLE AND SAFE VESSELS IN U.S. SHIPYARDS, AND THEIR OPERATION UNDER THE U.S.-FLAG.

ON NOVEMBER 18, 1980. MARAD RECEIVED AN APPLICATION FOR GUARANTEES FROM AT-SEA INCINERATION, INC., TO AID IN THE FINANCING OF TWO INCINERATOR VESSELS UNDER THE TITLE XI PROGRAM. THE TITLE XI PROGRAM IS A GUARANTEE PROGRAM ESTABLISHED BY THE MERCHANT MARINE ACT, 1936, AS AMENDED, THAT PROVIDES FOR A FULL FAITH AND CREDIT GUARANTEE BY THE U.S. GOVERNMENT OF DEBT OBLIGATIONS ISSUED BY U.S. CITIZEN SHIPOWNERS FOR THE PURPOSE OF FINANCING OR REFINANCING U.S.-FLAG VESSELS CONSTRUCTED OR RECONSTRUCTED IN U.S. SHIPYARDS. THE TITLE XI PROGRAM ENABLES OWNERS OF ELIGIBLE VESSELS TO OBTAIN LONG-TERM FINANCING ON FAVORABLE TERMS AND CONDITIONS AND AT INTEREST RATES COMPARABLE TO THOSE AVAILABLE TO LARGE AND FINANCIALLY STRONG CORPORATIONS. FUNDS SECURED BY THE GUARANTEED DEBT OBLIGATIONS AND USED FOR FINANCING THE VESSELS ARE OBTAINED IN THE PRIVATE SECTOR. EACH PROJECT MUST BE DETERMINED TO BE ECONOMICALLY SOUND, AND THE PROPOSED SHIPOWNER AND/OR OPERATOR MUST MEET MANAGEMENT AND FINANCIAL CRITERIA. THE BASIC FINANCIAL AND COLLATERAL REQUIREMENTS IMPOSED ON THE SHIPOWNER INCLUDE FUNDING EQUITY AT A MINIMUM OF 25 PERCENT OF THE TOTAL CONSTRUCTION COST OF THE VESSEL. THE SHIPOWNER IS ALSO REQUIRED TO HAVE WORKING CAPITAL ADEQUATE TO FUND ONGOING OPERATIONS AND HAVE AN ADEQUATE NET WORTH POSITION.

IN APRIL 1982, MARAD ISSUED A TITLE XI LETTER COMMITMENT TO FINANCE THE CONSTRUCTION OF TWO U.S.-FLAG VESSELS, OUTFITTED WITH INCINERATORS. MARAD'S DECISION TO PROCEED WITH THE PROJECT WAS BASED ON FAVORABLE SUPPORTING TECHNICAL EVIDENCE, AND ECONOMIC PROJECTIONS. ALTHOUGH EPA HAD NOT YET PROMULGATED PERMITTING REGULATIONS FOR INCINERATION AT SEA, BECAUSE OF THE LONG LEAD TIME REQUIRED IN SHIP CONSTRUCTION PROJECTS, MARAD DID NOT DELAY COMMENCEMENT OF THE PROJECT. FURTHER, EPA'S ADMINISTRATOR COSTLE'S APPROVAL OF THE INTERAGENCY WORK GROUP REPORT AND RECOMMENDATIONS IN OCTOBER 1980 SIGNIFIED TO MARAD EPA'S DESIRE TO SEE THE EARLY DEVELOPMENT OF AT-SEA INCINERATION CAPABILITY IN THE UNITED STATES. MOREOVER, EPA PERMITS AND REGULATIONS WERE IN PLACE FOR LAND BASED INCINERATION OF TOXIC CHEMICAL WASTES. HENCE, THERE WAS NO REASON TO EXPECT A DELAY BY EPA IN PROMULGATING REGULATIONS FOR OCEAN INCINERATION OF TOXIC CHEMICAL WASTES.

THE SHIPS ARE NOW UNDER CONSTRUCTION AT TACOMA BOATBUILDING COMPANY (TBC) UNDER A \$92.5 MILLION CONTRACT. THE GOVERNMENT'S GUARANTEE IS \$69.4 MILLION; BONDS HAVE BEEN ISSUED FOR \$59.9 MILLION; WITH THE BONDS FOR THE REMAINING \$9.5 MILLION TO BE ISSUED AT THE DELIVERY OF THE FIRST VESSEL. THE BONDS HAVE A TERM OF 20 YEARS AND ARE PAYABLE SEMI-ANNUALLY. THE SHIPOWNER IS AT-SEA INCINERATION, Inc. (ASI). ASI IS 70 PERCENT OWNED BY THE SHIPBUILDER, TBC, AND 30 PERCENT BY APOLLO MARINE CORPORATION. UPON DELIVERY, THE VESSELS WILL BE MANAGED AND OPERATED BY APOLLO MARINE CORPORATION, A SUBSIDIARY OF APEX MARINE.

AFTER THE APOLLO LETTER COMMITMENT WAS APPROVED, THE GENERAL ACCOUNTING OFFICE, AT THE REQUEST OF CONGRESS, REVIEWED THE APOLLO LOAN GUARANTEE. THE GENERAL ACCOUNTING OFFICE FILED NO REPORT. WE UNDERSTAND THEY FOUND NO BASIS TO QUESTION EITHER THE LEGALITY OF THE GUARANTEE OR THE DETERMINATION OF THE ECONOMIC SOUNDNESS OF THE PROJECT.

SINCE APPROVAL OF THE APOLLO LETTER COMMITMENT CONGRESS PASSED LEGISLATION (P.L. 97-389) WHICH DESIGNATES THE TRANSPORTATION OF HAZARDOUS WASTE FROM A PORT IN THE UNITED STATES FOR INCINERATION AT SEA AS SO-CALLED JONES ACT OR DOMESTIC TRADE. THE TRADE IS THEREFORE LIMITED BY LAW TO U.S.-FLAG VESSELS WHICH ARE BUILT IN THE UNITED STATES, OWNED BY U.S. CITIZENS AND CREWED BY AMERICANS. TWO EXISTING FOREIGN-BUILT INCINERATOR SHIPS, THE VULCANUS I AND VULCANUS II, WERE GIVEN "GRANDFATHER" RIGHTS IN THE SAME LEGISLATION, PROVIDED EXPLICIT CONDITIONS FOR THEIR INSPECTION AND OUTFITTING WERE MET. THESE SHIPS ARE NOW OWNED BY AN AMERICAN COMPANY.

DESPITE SOME DELAYS IN CONSTRUCTION, THE FIRST INCINERATOR VESSEL IS ESTIMATED BY THE SHIPYARD FOR DELIVERY THIS MONTH AND THE SECOND VESSEL FOR DELIVERY IN LATE DECEMBER. AS WITH ANY START UP ENTERPRISE, IF SIGNIFICANT ADDITIONAL DELAYS ARE ENCOUNTERED INCLUDING NECESSARY EPA PERMITTING, ASI WILL REQUIRE ADDITIONAL CAPITAL TO MEET ITS FINANCIAL COMMITMENTS. IF ASI WERE TO DEFAULT ON ITS TITLE XI PAYMENTS, THE GOVERNMENT IS OBLIGATED TO HONOR ITS GUARANTEE.

MARAD CONTINUES TO MAINTAIN CONTACT WITH EPA AND REGULARLY REVIEWS THE STATUS OF THE PERMITTING PROCESS. MARAD HAS ALSO COMMENTED ON THE DRAFT PROPOSED OCEAN INCINERATION REGULATIONS.

MARAD BELIEVES THAT THE CONSTRUCTION OF THE FIRST TWO U.S. INCINERATOR SHIPS IS AN IMPORTANT STEP IN A PROGRAM TO DEVELOP OTHER INDUSTRIAL PLANT VESSELS FOR MULTIPLE USES. THE CONSTRUCTION OF PLANT VESSELS REPRESENTS AN IMPORTANT FUTURE MARKET FOR AMERICAN SHIPYARDS.

MR. CHAIRMAN. THAT CONCLUDES MY PREPARED STATEMENT. I WILL BE PLEASED TO ANSWER ANY QUESTIONS THAT YOU OR THE MEMBERS OF THE SUBCOMMITTEE MAY HAVE.