

STATEMENT OF
REAR ADMIRAL CLYDE T. LUSK, JR.
CHIEF, OFFICE OF MERCHANT MARINE SAFETY
UNITED STATES COAST GUARD
BEFORE THE
HOUSE SUBCOMMITTEE ON FISHERIES AND WILD LIFE CONSERVATION
AND THE ENVIRONMENT
SUBCOMMITTEE ON OCEANOGRAPHY
DECEMBER 7, 1983

GOOD MORNING MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE. I AM REAR ADMIRAL CLYDE T. LUSK, JR., CHIEF OF THE COAST GUARD'S OFFICE OF MERCHANT MARINE SAFETY. WITH ME ARE CAPTAIN RICHARD L. BROWN, DEPUTY CHIEF, OFFICE OF MARINE ENVIRONMENT AND SYSTEMS, AND MR. FRITS WYBENGA OF THE MARINE TECHNICAL AND HAZARDOUS MATERIALS DIVISION, OFFICE OF MERCHANT MARINE SAFETY. I APPRECIATE THIS OPPORTUNITY TO PRESENT AN OVERVIEW OF MY SERVICE'S INVOLVEMENT WITH INCINERATING HAZARDOUS WASTES AT SEA. THE COAST GUARD PLAYS A MULTI-FACETED ROLE WITH RESPECT TO SUCH INCINERATION AND OUR EFFORTS CAN BE BROADLY BROKEN DOWN INTO THOSE WHICH IMPACT ON THE SHIP, THE PORT AREA, THE WATERWAY AND THE ENVIRONMENT.

INCINERATION IS A RELATIVELY NEW PROCESS IN THE MARITIME WORLD WHEN COMPARED TO THE MORE TRADITIONAL FUNCTIONS OF CARGO AND PASSENGER CARRIAGE. THE

EVOLUTION IN DEVELOPMENT OF EXOTIC AND COMPLEX CHEMICAL PRODUCTS BROUGHT WITH IT THE COMPANION PROBLEM OF DISPOSAL AND THE ADVENT OF STRICT ENVIRONMENTAL CONTROLS FOR DISPOSAL OF HAZARDOUS WASTES ASHORE WHICH HAS SERVED, IN MY VIEW, AS THE CATALYST FOR DEVELOPMENT OF THE CONCEPT OF OCEAN INCINERATION OF HAZARDOUS WASTES.

IN THE EARLY 70'S, A SPECIALLY DESIGNED AND BUILT INCINERATOR SHIP CAME TO THE UNITED STATES TO BURN CHLORINATED HYDROCARBON WASTES FOR SHELL OIL. THE QUESTION OF WHAT SHIP DESIGN AND CONSTRUCTION REQUIREMENTS SHOULD BE APPLIED WAS NOT UNIQUE TO THIS SHIP. ESSENTIALLY, THE SHIP WAS CARRYING HAZARDOUS CHEMICALS FROM U.S. PORTS AND THE UNITED STATES WAS EXPERIENCING AT THAT TIME A VERY RAPID INCREASE IN THE NUMBER OF FOREIGN VESSELS CARRYING HAZARDOUS CHEMICALS INTO AND OUT OF OUR PORTS.

AT THAT TIME, THERE WERE NO SPECIFIC INTERNATIONAL STANDARDS WHICH ADDRESSED SHIP DESIGN AND CONSTRUCTION STANDARDS FOR THESE SPECIAL PURPOSE BUILT SHIPS. WITH THAT VACUUM THE UNITED STATES INITIATED A "LETTER OF COMPLIANCE" PROGRAM FOR FOREIGN FLAG CHEMICAL CARRIERS. WE TOOK THREE APPROACHES. FIRST, THAT A SHIP SHOULDN'T ENTER U.S. PORTS THAT DID NOT HAVE SPECIFIC MEASURES TAKEN TO ENSURE THE INTEGRITY OF THE CARGO CONTAINMENT SYSTEM. THIS WAS DONE BY REVIEWING THE VESSEL'S PLANS. SECOND, THAT THE SHIP SHOULD BE BUILT TO THE STANDARDS DETAILED ON THOSE PLANS; THIS WAS DONE BY INSPECTION, AND LASTLY, THAT THE SHIP CONTINUED TO BE IN AN APPROPRIATE CONDITION AS PROVEN BY PERIODIC INSPECTION. SHIPS MEETING THESE REQUIREMENTS ARE ISSUED A "LETTER OF COMPLIANCE" THAT IS REISSUED ANNUALLY AFTER INSPECTION. THE PROGRAM IS STILL

IN EXISTENCE AND WE NOW HAVE INTERNATIONALLY ACCEPTED STANDARDS FOR CHEMICAL CARRIERS WITH SPECIFIC MODIFICATIONS WHICH ADDRESS SHIPS CONDUCTING INCINERATION AT SEA. IN ADDITION TO THE LETTER OF COMPLIANCE PROGRAM, SECTION 502 OF P.L. 97-389 PROVIDES THAT THE INCINERATION EQUIPMENT ON THE EXEMPT FOREIGN FLAG INCINERATOR SHIPS MEET ALL CURRENT COAST GUARD AND ENVIRONMENTAL PROTECTION AGENCY STANDARDS AND THAT THE VESSELS SHALL, IN ADDITION TO ALL FLAG STATE INSPECTIONS, BE INSPECTED BY THE COAST GUARD "AS WOULD BE REQUIRED OF A VESSEL OF THE UNITED STATES." WE ARE SATISFIED, MR. CHAIRMAN, THAT THESE MEASURES WILL PROVIDE ADEQUATE SAFETY FROM THE SHIP DESIGN AND CONSTRUCTION STANDPOINT. I WILL BE PROVIDING ADDITIONAL DETAILS CONCERNING IMPLEMENTATION OF P.L. 97-389.

AS I POINTED OUT EARLIER, COAST GUARD RESPONSIBILITY IS NOT LIMITED TO THE SHIP ITSELF, BUT ALSO THE PORT AND WATERWAY IN WHICH IT OPERATES. THE RESPONSIBILITY IS MET THROUGH OUR TRADITIONAL ROLE OF ASSURING THAT APPROPRIATE AIDS TO NAVIGATION ARE IN PLACE AND IS SUPPLEMENTED BY A PORT SAFETY PROGRAM WHICH IS ADMINISTERED BY COAST GUARD CAPTAINS OF THE PORT. IF WE TAKE A CASE IN POINT, FOR THE PORT OF MOBILE, ALABAMA, THE CAPTAIN OF THE PORT IN MOBILE WILL TAKE A NUMBER OF ACTIONS WITH RESPECT TO THE LOADING FACILITY, THE SHIP IN TRANSIT AND THE WATERWAY IN GENERAL FOR OPERATION OF INCINERATOR SHIPS.

. CAPTAIN OF THE PORT, MOBILE WILL IMPOSE ON THE FACILITY THE REQUIREMENTS OF 33 CODE OF FEDERAL REGULATIONS PART 126 FOR A CARGO OF PARTICULAR HAZARD. THESE REGULATIONS REQUIRE PERIODIC COAST GUARD INSPECTION OF

THE OVERALL CONDITION OF THE FACILITY, INCLUDING AN ANNUAL HYDROSTATIC TEST OF ALL CARGO HOSES AND PIPING.

- . HE WILL ENSURE THAT THE PERSON IN CHARGE OF THE FACILITY DURING TRANSFER OPERATIONS AND THE CAPTAIN OF THE PORT ARE PROVIDED DOCUMENTARY EVIDENCE OF THE TRAINING AND COMPETENCE OF THE PERSON IN CHARGE WHO IS TO PERFORM THE TRANSFER OPERATIONS OF THE SPECIFIED CARGO. THE ENTIRE TRANSFER SHALL BE UNDER THE DIRECT CONTROL AND SURVEILLANCE OF SUCH PERSON IN CHARGE WHO SHALL MAINTAIN A MEANS OF COMMUNICATION WITH THE PERSON IN CHARGE ON THE VESSEL DURING TRANSFER TO PROVIDE IMMEDIATE NOTIFICATION TO SECURE THE TRANSFER SYSTEM SHOULD THIS BE NECESSARY.

- . THE COTP WILL ENSURE THAT A WARNING ALARM IS INSTALLED BY THE FACILITY AT THE WATERSIDE TO WARN WATER TRAFFIC IN THE EVENT OF FIRE OR CARGO RELEASE. THE WARNING ALARM SHALL BE EITHER A SIREN OR EMERGENCY ROTATING FLASHING LIGHT AND OF SUFFICIENT INTENSITY TO BE HEARD OR SEEN A DISTANCE OF 1 MILE.

- . DURING TRANSFER OPERATIONS CAPTAIN OF THE PORT PERSONNEL WILL VISIT THE FACILITY PERIODICALLY TO ENSURE CONTINUED COMPLIANCE WITH THE REGULATIONS.

- . HE WILL DIRECT THE MOVEMENT OF INCINERATION SHIPS BOTH INBOUND (UNLOADED) AND OUTBOUND (LOADED). THE SHIP WILL BE REQUIRED TO PROVIDE 24 HOUR ADVANCE NOTICE PRIOR TO ARRIVAL AT THE FACILITY. THIS NOTICE

WILL INCLUDE A REPORT ON THE CONDITION OF THE VESSEL'S PROPULSION, STEERING, NAVIGATION AND CARGO SYSTEMS.

. WHETHER INBOUND OR OUTBOUND, THE SHIP WILL BE ALLOWED TO TRANSIT DURING DAYLIGHT HOURS ONLY AND WITH A MINIMUM OF TWO (02) MILES VISIBILITY. THE CAPTAIN OF THE PORT WILL ISSUE A LOCAL NOTICE TO MARINERS ESTABLISHING A MOVING SAFETY ZONE OF 300 FEET IN ALL DIRECTIONS AROUND THE SHIP DURING TRANSIT AND ALL OTHER VESSELS WILL BE PROHIBITED FROM ENTERING THE SAFETY ZONE WITHOUT HIS SPECIFIC APPROVAL. THE COAST GUARD WILL ESCORT THE SHIP TO ENFORCE THE SAFETY ZONE.

. FINALLY, THE SHIP WILL BE REQUIRED TO BE ESCORTED BY TUGS, WHILE INBOUND FROM THE MOBILE RIVER ENTRANCE TO THE FACILITY AND OUTBOUND, FROM THE FACILITY TO THE THEODORE SHIP CHANNEL ENTRANCE. THE NUMBER OF TUGS REQUIRED WILL BE DETERMINED ON A CASE BY CASE BASIS, CONSIDERING WEATHER AND TRAFFIC IN MOBILE BAY.

WHILE IN TRANSIT IN THE GULF AND DURING INCINERATION, THE EIGHTH COAST GUARD DISTRICT WILL BROADCAST NOTICES TO MARINERS ON THE POSITIONS SUBMITTED BY THE VESSEL. THE PURPOSE OF THESE BROADCASTS WILL BE TO ADVISE OTHER MARINERS TO STEER CLEAR OF THESE VESSELS. IT SHOULD BE NOTED THAT THESE PROVISIONS HAVE BEEN SPECIFICALLY TAILORED TO THE PORT OF MOBILE TAKING IN TO ACCOUNT THE LOCAL CONDITIONS.

AS PART OF THE PERMITTING PROCESS, THE ENVIRONMENTAL PROTECTION AGENCY REQUIRES PROSPECTIVE VESSEL INCINERATION ACTIVITIES TO SUBMIT A CONTINGENCY PLAN WHICH ADDRESSES THEIR CAPABILITY TO DEAL WITH POLLUTION EMERGENCIES INVOLVING THEIR VESSELS OR CARGOES. AT THE REQUEST OF ENVIRONMENTAL PROTECTION AGENCY, THE COAST GUARD HAS AGREED TO REVIEW POLLUTION CONTINGENCY PLANS AND ADVISE THEM AS TO THEIR ADEQUACY.

AS YOU ARE AWARE, MR. CHAIRMAN, IN THE EVENT OF AN ENVIRONMENTAL EMERGENCY, THE COAST GUARD, UNDER THE NATIONAL OIL AND HAZARDOUS SUBSTANCES CONTINGENCY PLAN, HAS A RESPONSE MECHANISM IN PLACE TO OVERSEE INDUSTRY RESPONSE MEASURES AND TO ENSURE THAT PROPER REMOVAL ACTIONS ARE UNDERTAKEN. THE CONTINGENCY PLAN DEVELOPED AS THE RESULT OF THE PERMITTING PROCESS WOULD COMPLEMENT THIS MECHANISM. IN THE GULF OF MEXICO, THE COAST GUARD RESPONSE MECHANISM INCLUDES THE RESOURCES OF THE FEDERAL AND STATE AGENCIES COMPRISING THE REGIONAL RESPONSE TEAMS, THE EMERGENCY PORT TASK FORCES OF OUR PRE-DESIGNATED ON-SCENE COORDINATORS, AND THE SERVICES OF THE GULF STRIKE TEAM WHO HAVE EXPERTISE IN CHEMICAL RESPONSE.

AS INDICATED EARLIER I WANT TO PROVIDE AN UPDATE ON P.L. 97-389. THIS LAW HAS ESTABLISHED THAT THE TRANSPORTATION OF HAZARDOUS WASTES FROM A POINT IN THE UNITED STATES TO SEA, FOR THE PURPOSE OF INCINERATION, IS TRANSPORTATION BY WATER BETWEEN POINTS IN THE UNITED STATES. THIS PROVISION BECOMES EFFECTIVE AFTER 31 DECEMBER 1983 OR AT SUCH A TIME AS AN INCINERATION SHIP IS CONSTRUCTED OR DOCUMENTED IN THE UNITED STATES.

THE LAW ALSO PERMITS FOREIGN INCINERATION VESSELS, UNDER CONSTRUCTION BEFORE MAY 1, 1982, TO ENGAGE IN THIS TRADE PROVIDED THEY ARE INSPECTED THE SAME AS A U.S. VESSEL. ONLY THE OWNERS OF TWO VESSELS, VULCANUS I AND VULCANUS II, HAVE DEMONSTRATED INTEREST IN HAVING THEIR VESSELS ENGAGE IN THIS TRADE. THE INSPECTION OF THE VULCANUS I STARTED IN ANTWERP, BELGIUM ON 1 DECEMBER 1983 AND WILL INCLUDE A DRYDOCKING AND COMPLETE INTERNAL AND EXTERNAL INSPECTION OF THE VESSEL TO U. S. STANDARDS. THE VESSEL HAD A COMPLETE NEW FOREBODY INSTALLED IN THE SUMMER OF 1983 AND HAS NOT CARRIED ANY CARGO SINCE. THE STRUCTURE OF THE HULL IS BEING ACCEPTED BASED ON THE CLASSIFICATION SOCIETY RULES (GERMANISHER LLOYDS). OUR INSPECTION WILL ASCERTAIN THE PRESENT CONDITION OF THE HULL STRUCTURE AND DETERMINE IF IT IS SATISFACTORY. WHILE MUCH OF THE LIFESAVING EQUIPMENT, FIREFIGHTING EQUIPMENT AND MACHINERY WILL PROBABLY BE ACCEPTED AS EQUIVALENT TO U.S. COAST GUARD APPROVED EQUIPMENT IT WILL BE REQUIRED TO MEET THE OPERATIONAL TESTS REQUIRED OF U.S. VESSELS.

A DATE FOR THE COAST GUARD INSPECTION OF THE VULCANUS II TO U.S. REQUIREMENTS HAS NOT BEEN DETERMINED. THIS INSPECTION MAY TAKE PLACE ANYTIME BEFORE NOVEMBER 1988 AND MEET THE PROVISIONS OF THE LAW BUT THE OWNERS HAVE INDICATED THAT THE INSPECTION WILL BE SCHEDULED LONG BEFORE THAT DATE. PRIOR TO THE INSPECTION FOR CONFORMANCE WITH FULL U.S. REQUIREMENTS THE VULCANUS II WILL BE SUBJECT TO LETTER OF COMPLIANCE (LOC) EXAMINATIONS PREVIOUSLY ADDRESSED, INCLUDING PLAN REVIEW AND DOCKSIDE EXAMINATION OF THE VESSEL BY COAST GUARD INSPECTORS.

WHEN REVIEWING THE DESIGN AND CONSTRUCTION OF VULCANUS I AND II AND THE NEW INCINERATOR SHIPS BEING BUILT OR PROPOSED FOR U.S. FLAG, THE COAST GUARD HAS APPLIED THE RULES AND REGULATIONS FOR CHEMICAL TANKSHIPS INSOFAR AS THEY APPLY. WHERE THESE RULES WERE INAPPLICABLE, INAPPROPRIATE, OR SILENT WITH REGARD TO INCINERATOR SHIP DESIGN, THE INTERNATIONAL MARITIME ORGANIZATION'S (IMO) SAFETY REQUIREMENTS FOR INCINERATOR SHIPS WERE USED. THE IMO REQUIREMENTS WILL ENTER INTO FORCE AS MANDATORY INTERNATIONAL STANDARDS IN JULY 1986, BUT ARE USED NOW IN THE ABSENCE OF SPECIFIC COAST GUARD REGULATIONS FOR INCINERATOR SHIPS. THIS APPROACH HAS ALLOWED THE COAST GUARD TO WORK WITH THE DESIGNER TO ACHIEVE THE DESIRED LEVEL OF SAFETY, YET AT THE SAME TIME, DOES NOT STIFLE INNOVATIVE OR NOVEL DESIGN BY TRYING TO FORCE AN INCINERATOR SHIP TO MEET CHEMICAL TANKSHIP RULES IN ALL RESPECTS.

MR. CHAIRMAN, WE ARE CONFIDENT THAT OUR ROLE IN ASSURING THE SAFETY OF INCINERATION SHIP'S IS WELL IN HAND. WE WILL BE HAPPY TO ADDRESS ANY QUESTIONS THAT YOU MAY HAVE.