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#### MESSAGE:

Attached is a copy of Extension of Time  
filed yesterday for Sea Ray Boats.

FROM:	Angela Morrison	CLIENT NO.	JEFFAY/109 (5302)
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**THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In the Matter of an  
Application for Permit by:

OGC No.: 99-1794

Sea Ray Boats, Inc.  
1200 Sea Ray Drive  
Merritt Island, FL 32953

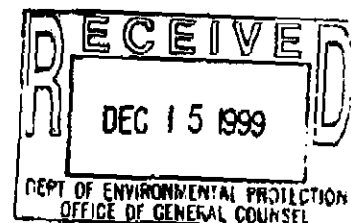
Permit No.: 0090093-003-AC; PSD-FL-274  
Cape Canaveral Plant  
Brevard County, Florida

**REQUEST FOR EXTENSION OF TIME**

By and through undersigned counsel, Sea Ray Boats, Inc. (Sea Ray) hereby requests, pursuant to Florida Administrative Code Rule 62-110.106(4), an Extension of Time, to and including January 14, 2000, in which to file a Petition for Administrative Proceedings in the above-styled matter. As good cause for granting this request, Sea Ray states the following:

1. On or about October 8, 1999, Sea Ray received from the Department of Environmental Protection (Department) an "Intent to Issue Air Construction Permit" (Permit No. 0090093-003-AC, PSD-FL-274) for the proposed Cape Canaveral Plant to be located in Brevard County, Florida. Along with the Intent to Issue, Sea Ray received a proposed Air Construction Permit and "Public Notice of Intent to Issue Air Construction Permit."
2. Sea Ray received from the Department an extension of time through and including December 15, 1999, by order dated November 3, 1999.
3. The proposed permit and associated documents contain several provisions that warrant clarification, correction, or revision.
4. Representatives of Sea Ray have corresponded and intend to continue to correspond with staff of the Department's Bureau of Air Regulation in an effort to resolve all issues.

130901.2



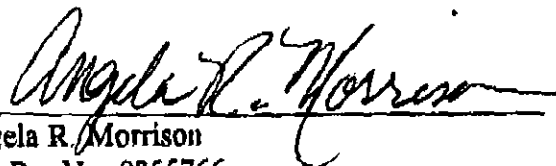
5. This request is filed simply as a protective measure to avoid waiver of Sea Ray's right to challenge certain conditions contained in the proposed permit. Grant of this request will not prejudice either party, but will further their mutual interest and likely avoid the need to file a petition and proceed to a formal administrative hearing.

6. Counsel for Sea Ray has attempted without success to contact Douglas Beason with the Department's Office of General Counsel regarding this request.

WHEREFORE, Sea Ray respectfully requests that the time for filing of a Petition for Administrative Proceedings in regard to the Department's Intent to Issue Air Construction Permit for Permit No. 0090093-003-AC, PSD-FL-274 be formally extended to and including January 14, 2000. If the Department denies this Request, Sea Ray requests the opportunity to file a Petition for Administrative Proceedings within 10 days of such denial.

Respectfully submitted this 15<sup>th</sup> day of December, 1999.

HOPPING GREEN SAMS & SMITH, P.A.



Angela R. Morrison  
Fla. Bar No. 0855766  
123 South Calhoun Street  
Tallahassee, FL 32301  
(850) 222-7500


Attorney for SEA RAY BOATS, INC.

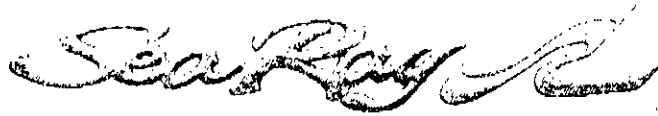
**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a copy of the foregoing has been furnished to the following  
by U.S. Mail on this 15<sup>th</sup> day of December, 1999:

Clair H. Fancy, P.E., Chief  
Bureau of Air Regulation  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2600

Douglas Beason, Esq.  
Office of General Counsel  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2600

  
\_\_\_\_\_  
Angela R. Morrison



December 14, 1999

RECEIVED

DEC 15 1999

BUREAU OF AIR REGULATION

Florida Department of Environmental Protection  
Bureau of Air Regulations  
Twin Towers Office Bldg.  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Attn: C. H. Fancy, P.E.

Dear Mr. Fancy:

Attached please find several copies of a health risk evaluation for potential exposure to styrene in the vicinity of the proposed Sea Ray Cape Canaveral plant. This report was prepared at our request by Hazardous Substance & Waste Management Research, Inc, an independent research firm

As you can see in the discussion of air quality estimates and health risk issues in Section III and the summary and conclusions presented in Section V, the researchers found that the projected styrene air concentrations are well below those which would cause any health effects to local residents, including potentially sensitive individuals.

I am encouraged by the finding of the report. Sea Ray is committed to addressing our neighbors' concerns, and to fulfilling our responsibilities as a good corporate neighbor. Sea Ray is an environmentally conscientious industry leader in reducing styrene and other emissions. Our operations safely protect the health of our neighbors, our employees and the environment. We are committed to making improvements that enhance environmental quality, health and safety, and we stand by that commitment

I hope you find this report of value. I will take the liberty of calling you next week to discuss the findings with you.

Sincerely,

SEA RAY BOATS, INC.

Dennis J. Wilson  
Vice President/General Manager

RECEIVED

DEC 15 1999

BUREAU OF AIR REGULATION

**SUMMARY REPORT**

**HEALTH RISK EVALUATION FOR  
POTENTIAL EXPOSURE TO STYRENE IN THE  
VICINITY OF THE PROPOSED SEA RAY  
CAPE CANAVERAL PLANT**

**Prepared for:**

*Sea Ray Boats, Inc.  
Merritt Island, Florida*

**Prepared by:**

*Hazardous Substance & Waste Management Research, Inc.  
Tallahassee, Florida*

**December, 1999**

## I. INTRODUCTION AND HISTORICAL PERSPECTIVE

Sea Ray Boats, Inc. operates a fiberglass boat manufacturing facility in Merritt Island, Florida. The company has been conducting operations in that area of Merritt Island for nearly 30 years. Sea Ray applied for, and has been in the process of negotiating with the Florida Department of Environmental Protection (FDEP), a permit for the building of a new manufacturing facility, termed the Cape Canaveral Plant, which is to be located approximately 1.2 miles from the existing plant operations. The emissions of interest from the existing operation as well as the planned facility are styrene vapors, which are generated during boat manufacturing processes.

The health of employees at the Sea Ray facilities is protected by operational controls and assured by a program in which the company regularly measures and records styrene concentrations in plant work areas by taking air samples to verify that levels are within acceptable limits for workplace safety. For specialty jobs or activities, where conditions may at times result in higher air levels, other protective practices are used, such as additional ventilation or respiratory protection. Any time that workers are exposed to styrene in air without respiratory protection, the average air levels are less than 50,000 parts per billion (ppb; equivalent to 50 ppm). A written Respiratory Protection Program is in place at Sea Ray. In addition, Sea Ray utilizes materials with low styrene content and low-emitting processes where ever possible, which reduce potential worker exposure by decreasing releases of styrene to the air.

One issue that has been raised during discussions regarding the new facility is the potential significance of airborne styrene concentrations that may be released from the plant and dispersed to air in the vicinity. This Summary Report addresses the extent of projected releases of styrene to the air, and provides additional information that explains what styrene is, what chemical characteristics it has, and what health significance may be associated with projected emissions.

## II. TOXICOLOGY AND REGULATORY STATUS OF STYRENE

### A. Toxicological Characteristics of Styrene

Styrene is a colorless to yellowish liquid with a sweetish odor at room temperature. It can easily be linked together in long chains to form a clear to whitish solid ("polystyrene"). Several billion pounds of the chemical are used each year in the U.S. in the making of synthetic rubber and plastic products including polystyrene packing material, insulation, piping, marine products, medical devices, carpet backing, drinking cups, toys and many types of food packaging. Styrene is present in a variety of applications in the manufacture of fiberglass boats, where it is released into the air principally during the lamination process of building the hull and component parts.

The substance also is present environmentally in indoor and outdoor air in the environment as a result of exhaust from cars and as a natural component of cigarette smoke. It also is released from building materials and consumer products (polystyrene products such as packaging materials, toys, housewares and appliances that may contain residual amounts of unlinked styrene). Indoor air is the principal route of styrene exposure for the general population. Average indoor air levels of styrene in homes and buildings typically range from 0.2 to 1.8 ppb, and are generally attributable to releases from sealants and other components of building materials, as well as from consumer products and tobacco smoke (U.S. EPA, 1999a).

Styrene air concentrations are typically expressed in one of two ways. The data may be presented in parts per million [ppm; one ppm equivalent to 1,000 parts per billion, (ppb)] or in milligrams per cubic meter of air ( $\text{mg}/\text{m}^3$ ). One  $\text{mg}/\text{m}^3$  is equal to 1,000 micrograms per cubic meter ( $\text{ug}/\text{m}^3$ ). The formula that is used to convert air data that are presented in ppb to a concentration in  $\text{ug}/\text{m}^3$  is presented in Appendix A to this Summary Report.



Styrene is found in some food products prior to packaging, such as coffee beans, peanuts and other nuts, beef and strawberries, but can also occur in foods after they have come in contact with polystyrene packaging (ATSDR, 1992). It is approved by the U.S. Food and Drug Administration for use as a flavoring agent in some foods, such as ice cream and candy (Mannsville, 1993; U.S. EPA, 1994).

Most of the information on the potential effects following inhalation exposure to styrene in humans comes from studies of workers who were exposed to high concentrations of styrene vapors in the production and use of plastics and resins, especially polystyrene resins. There have been no reports of deaths in humans directly associated with exposure to styrene in the workplace. Inhalation studies in animals confirm that styrene exhibits low to moderate acute toxicity, and that very high exposures are required to cause such effects (ATSDR, 1992; U.S. EPA, 1994). Styrene has been extensively studied and air concentrations which may cause various health effects have been identified. Those levels which cause these effects are very high, indicating that styrene has limited toxic properties, especially at low concentrations in air.

Several human studies have examined the respiratory effects caused by inhalation exposure to styrene. The most commonly reported general symptom is mucous membrane irritation, eye and throat irritation and gastrointestinal effects (U.S. EPA, 1994; U.S. EPA, 1999a), again caused by high levels in air. Several epidemiological (e.g., studies on human workplace populations) and clinical studies have shown that styrene exposure at high levels causes reversible alterations of central nervous system functions in humans, principally mood changes, tiredness and slowed reaction times. Men exposed to levels of 52-117 ppm on a long-term basis in a boat-building factory reportedly were more subject to mood changes, were more likely to report feeling tired and had slower reaction times than unexposed workers. The levels reported to cause

any neurological changes were in the 50 to 100 ppm range in air (ATSDR, 1992). Similar reports summarized in the Hazardous Substances Data Bank (HSDB, 1999) and reports summarized by the American Conference of Governmental Industrial Hygienists (ACGIH, 1991) describe mild and transient eye and throat irritation at concentrations greater than 100 ppm, but also note that some people experience no irritation at concentrations as high as 375 ppm in air.

However, a more recent comprehensive summary study combining several data sets which included more than 55,000 workers in styrene-related industries, both in the United States and Europe, has shown that exposure to styrene does not cause cancer nor does it cause any other chronic disease in typical occupational circumstances. The levels of exposure to styrene encountered by occupational workers in the past were much higher than those to which workers currently are exposed. Since workplace exposures to styrene may be as much as 10,000-fold higher than expected environmental levels, the lack of adverse effects in workers even at high concentrations is an indicator that exposure to current environmental levels of styrene will not cause adverse health effects to the general public (SIRC, 1999).

Chronic (long-term) exposure to styrene at high levels in humans has been reported to result in similar, generally reversible, effects on the central nervous system, including headache, fatigue, weakness and depression, as well as minor effects on some kidney enzyme functions and on the blood (U.S. EPA, 1999a). These effects have only been reproducibly reported when long-term concentrations exceed 50 to 100 ppm. Any other effects that may be attributable to styrene in other organs occur only at even greater air levels.

Isolated epidemiologic studies by some authors have suggested there may be an association between styrene exposure and an increased risk of leukemia and lymphoma from workplace exposure. However, the evidence is generally accepted as invalid due

to the fact that multiple chemical exposures to known carcinogens (e.g., other chemicals or substances known to cause cancer) in addition to styrene were reported (e.g., butadiene, benzene) along with inadequate documentation of the levels and durations of exposure to styrene. The studies were judged inadequate because the multiple chemical exposures were not addressed (U.S. EPA, 1994) and because the worker population sizes were too small to be of statistical value (Calabrese and Kenyon, 1991; ATSDR, 1992). For workers exposed predominantly or exclusively to styrene, the data are either negative (do not show any potential carcinogenic effects) or inconclusive regarding the potential for causing cancer (Rom, 1998). In those instances, there also was inadequate information on the exposure levels of styrene and limited knowledge regarding the duration of exposure (U.S. EPA, 1999a). The International Agency for Research on Cancer (IARC; an international body which makes recommendations regarding potential health effects of various chemicals) concluded that the evidence for carcinogenicity in humans from epidemiological studies is inadequate and classifies styrene in Group 2B, possibly carcinogenic to humans, solely on the basis of suggestive animal data (IARC, 1987). The U.S. EPA, NIOSH, OSHA and ACGIH have failed to reach this conclusion and do not classify styrene as a possible carcinogen.

Regarding carcinogenicity, NIOSH states that "from the experimental animal investigations and from the epidemiological studies, there seems to be little basis to conclude that styrene is carcinogenic" (Calabrese and Kenyon, 1991). Similar statements have been made by other authors as well (e.g., Coggon, 1994).

#### **B. Regulatory Status and Health Guidance Regarding Styrene**

The Clean Air Act Amendments of 1990 list styrene as a hazardous air pollutant, a regulatory classification it shares with many substances including, for example, ethylene glycol (an antifreeze component) and naphthalene (a petroleum constituent

and one type of moth crystals). This classification influenced, in part, the permitting requirements for the new Sea Ray plant.

Occupational exposure to styrene is regulated by the federal Occupational Safety and Health Administration (OSHA). To date, however, U.S. EPA has not established a health-based ambient air quality standard for styrene, nor has FDEP. As described previously, Sea Ray has an extensive program in place to ensure worker safety and compliance with OSHA requirements. Many studies have been conducted concerning occupational exposure to styrene and possible adverse effects in humans. Styrene is not presently regulated or classified as a human cancer-causing agent by any U.S. government agency, including the U.S. Environmental Protection Agency (U.S. EPA) and OSHA or by the ACGIH and NIOSH (national advisory organizations). U.S. EPA presently lists the carcinogenicity classification of styrene as "not available" (U.S. EPA, 1999b). The agency has been in the process of reviewing the data for styrene for some time (U.S. EPA, 1999a; U.S. EPA, 1994); however, it does not regulate the substance as a carcinogen, nor has it done so in the past. As noted earlier, the few human studies that have raised a suggestion regarding carcinogenicity for styrene have been judged deficient due to the possible co-exposure to other potential cancer causing agents (e.g., butadiene, benzene), neither of which is used at the Sea Ray facility. No study describing low level (e.g., ppb), long-term exposure to styrene in air has concluded that there is any carcinogenic potential for the substance resulting from levels associated with environmental exposures.

The Occupational Safety and Health Administration (OSHA) regulates exposure to styrene in the U.S. workplace and requires that average levels in air over the course of a working day of 8 hours during a 40 hour workweek must be less than 100,000 parts per billion (ppb), and that they can not exceed 200 ppm for more than 15 minutes as a Short Term Exposure Limit (STEL) without other protective measures in place. The

National Institute for Occupational Safety & Health (NIOSH), another federal organization, recommends that average air levels for a workday of up to 10 hours should be less than 50 ppm, with a short term "Ceiling" value set at 100 ppm, similar in concept to the OSHA STEL value. The established workplace air levels for styrene are based on protecting employees against irritation of the eyes, nose, throat and lungs, as well as effects on the nervous system, which are agreed to be the most sensitive, or "earliest occurring" measures of styrene exposure.

Although FDEP has not developed an air standard for styrene, the agency has developed guidelines that often are used to judge the significance of airborne exposures to styrene and other chemicals. These guidelines (termed "Ambient Reference Concentrations" or ARCs) are available for short-term averaging periods (e.g., 8-hour and 24-hour averages) as well as for a long-term averaging period (e.g., annual average concentration). For styrene, the 8-hour average ARC value is 500.6 ppb (2,130 ug/m<sup>3</sup>), the 24-hour average value is 119.2 ppb (507 ug/m<sup>3</sup>) and the annual average ARC is 235 ppb (1,000 ug/m<sup>3</sup>). The 8-hour and 24-hour average concentrations are based upon a 100-fold reduction and a 420-fold reduction, respectively from the 50 ppm occupational protective value (FDEP, 1995). The annual average ARC is based upon the U.S. EPA inhalation Reference dose (RfD<sub>i</sub>) of 1 mg/m<sup>3</sup>, or 235 ppb. That RfD<sub>i</sub> value is defined by U.S. EPA as "an estimate (with uncertainty spanning as much as an order of magnitude) of a daily inhalation exposure of the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime" (U.S. EPA, 1999b). The RfD<sub>i</sub> is the value that U.S. EPA, FDEP and other states use to evaluate the noncarcinogenic effects of airborne environmental exposure to chemicals.

### **III. AIR QUALITY ESTIMATES AND HEALTH RISK ISSUES**

#### **A. Results of Emissions Evaluation and Air Modeling**

In order to judge the magnitude and significance of styrene air concentrations in the vicinity of the Cape Canaveral facility, standard approaches were employed to provide dispersion modeling of styrene following permitted releases to the atmosphere. The results of the emissions evaluation and air modeling (Golder Associates, 1999) are shown in Table 1 (Appendix B). As shown on that table, the mean and the maximum projected annual average air concentrations for the facility property boundary are 5.3 ppb and 6.2 ppb, respectively. Figure 1 (Appendix C) presents computer generated isopleths (lines of approximately equal concentration) for the projected air concentrations at and near the Cape Canaveral facility.

The mean and maximum projected annual average air concentrations for the nearest residential boundary also are shown in Table 1 (Appendix A). That nearest boundary is located immediately to the south of State Road 528. The mean concentration at the nearest residential boundary is projected to be approximately 3.1 ppb, while the maximum concentration is projected to be approximately 3.5 ppb. The nearest residential boundary concentrations are approximately 65 times lower than the appropriate regulatory guidance concentration of 235 ppb, which is based on the U.S. EPA Reference Concentration (RfC), described in greater detail in the following section (Figure 2). The 235 ppb health protective guideline also represents the FDEP's Ambient Reference Concentration (ARC) for an annual averaging time.

The projected 8-hour and 24-hour average styrene concentrations also are shown in Table 1. These are considered to be better, though still highly conservative, measures of the potential short term air concentrations. The highest projected 8-hour and the highest projected 24-hour concentration for the residential boundary (65.7 ppb and 41.9 ppb, respectively) are well below the Florida ARC guideline based on an 8-hour or 24-

hour averaging time (500.6 ppb and 119.2 ppb, respectively; Figure 3 and Figure 4). This supports the conclusion that styrene concentrations in the vicinity of the Cape Canaveral plant do not pose risks to human health. That conclusion is particularly true given the highly conservative nature of the modeling, which assumed emissions somewhat greater than those which will be emitted under the permit. The model also does not take into consideration the relatively rapid one to two day degradation of styrene in outdoor air, another conservative feature which should further limit health concerns .

#### **B. Health Risk Evaluation of Projected Off-Property Air Concentrations**

As briefly discussed in the previous section, the U.S. Environmental Protection Agency (U.S. EPA) has developed an inhalation-based health-protective Reference Concentration (RfC) which can be used to evaluate the potential for health risks from environmental exposure to airborne styrene. The inhalation RfC is based on the assumption that a threshold exists for health effects, and that the threshold (also known as the No Observed Adverse Effect Level or NOAEL) can be used with appropriate safety factors to set protective air levels for the human population, even assuming a continuous exposure source.

The inhalation RfC for styrene, defined in Section II-B, considers the potential for effects to both the respiratory system, which is the portal-of-entry, as well as for effects beyond the respiratory system if styrene is absorbed. The Reference Concentration for styrene is 1.0E+00 mg/m<sup>3</sup> (U.S. EPA, 1999), which is 1.0 mg/m<sup>3</sup>, or approximately 235 parts per billion (ppb in air).

The basis (i.e., the effect which occurs at the lowest long term air concentrations) which was used by U.S. EPA in developing the RfC for styrene is prevention of central nervous system effects, including decreased neurological function of occupational

workers (e.g., limited, transient effects on memory and visual perception at unspecified concentrations greater than 22,150 ppb). The data used by U.S. EPA were drawn from an epidemiological study where airborne exposure concentrations were much higher than would be encountered in air outside the Cape Canaveral facility. The No Observed Adverse Effect Level identified in that study was approximately 22,150 ppb, and that value was adjusted by correcting the NOAEL downward to approximately 8,010 ppb to account for differences between occupational vs continuous exposures. The epidemiological study analyzed exposures occurring over a period averaging nearly nine (9) years, ranging to well over 13 years.

Even though no effects were observed in that study at a concentration of approximately 8,010 ppb styrene, U.S. EPA nevertheless added a Safety Factor of 30 to address the possibility of more sensitive individuals, as well as to address concerns regarding the duration of the study. The U.S. EPA does not identify specific groups of sensitive individuals in the case of styrene, such as young children or the elderly, but adjusts the reference concentration to account for these potentially more sensitive populations. This Safety Factor, resulted in a further lowering of the RfC from 8,010 to 266 ppb, which was then rounded downward by the agency to the present RfC, which is equivalent to 235 ppb (U.S. EPA, 1999b).

The Florida Air Toxics Working Group established environmental exposures guidelines including an 8-hour ambient reference concentration (ARC) of 500.6 ppb, a 24 hr ARC of 119.2 ppb, and an annual ARC of 235 ppb (FDEP, 1995). The source for the derivation of these numbers of shown in Appendix A. The annual ARCs are derived from U.S. EPA sources that have been specifically developed to protect public health. If the chemical is not carcinogenic and an inhalation reference concentration (RfC) has been developed by U.S. EPA, then the RfC is used as the annual ARC. Since styrene is not classified as a carcinogen by U.S. EPA, its reference concentration is used



as the annual ARC. In most situations, if a particular emission is treated as a continuous, 365-day scenario in the dispersion model (when in reality it is not a continuous source) and the model input represents the maximum one-hour average emission rate, a comparison with the annual ARC is sufficient to determine whether the facility represents an air toxics concern (FDEP, 1995).

As additional points of comparison, it is worth noting that U.S. EPA Region 9 has calculated an ambient air concentration of 258 ppb ( $1.1 \text{ mg/m}^3$ ) as a preliminary remediation goal on the basis of potential long-term exposure to styrene (U.S. EPA, 1999c). The Region 9 values typically are used by Region 4 (which includes Florida) as well. The agency's Region III office recommends the same concentration as protective of human health on a potential chronic exposure basis (U.S. EPA, 1999d).

#### IV. ODOR CONSIDERATIONS

##### A. Odor Detection and Identification for Styrene

A wide range of odor values for styrene exist in the published literature. The styrene odor threshold range has been reported as 150 to 25,000 ppb (Environment Canada, 1981; Verschueren, 1983) and the Agency for Toxic Substances and Disease Registry (ATSDR) reports a value of 320 ppb (ATSDR, 1992). The lowest reported odor threshold for styrene is 8.5 parts per billion (ppb) (Verschueren, 1983). Recently, Rom (1998) reported an odor detection threshold of about 10 ppb and odor recognition ("as styrene") at near 100 ppb. A mean of 150 ppb for odor detection of styrene was reported by the U.S. EPA (U.S. EPA, 1992).

The ability to detect and to identify styrene also is related to one's familiarity with the substance. Individuals differ in their ability to detect styrene in air, but based on various studies, the odor of styrene is detectable in air by some people at levels in the range of 10-150 ppb, far below those concentrations that pose a danger to human health, which are typically reported to be in the range of 100,000 ppb. The conversion of units of measure for styrene in air is shown in Appendix A.

In one study, during an acute (e.g., short-term) inhalation exposure of humans to styrene, odor was not detectable at a concentration less than 10,000 ppb. At a concentration of 60,000 ppb, odor was detectable but nonirritant. Even at a concentration of 100,000 ppb, the respondents reported a strong odor but without excessive discomfort. A concentration of 376,000 ppb for one hour was associated with reversible neurological impairment. A very strong odor, strong eye and nasal irritation was reported when respondents were exposed to 600,000 ppb, which is far in excess of any projected air concentrations in the vicinity of the Cape Canaveral facility.

## **B. Comparison of Projected Air Concentrations with Odor Values**

The projected average and maximum annual average air concentrations at the property boundary and at the nearest residential property boundary are shown in Table 1. The projected 8 hour air concentrations at the nearest residential property boundary ranges from 61.5 to 73 ppb (average of 65.7 ppb). These values for the residential property are in the range of those reported for odor thresholds of 10-150 ppb, but are on the low end of the detectable range based on most reported studies. These predicted concentrations at the closest residential property boundary may explain why some complaints of odor in the vicinity of the Sea Ray plant have occurred in the past. However, as discussed in Section III of this report, the annual average values are all at least 65 times lower than the reference concentration of 235 ppb established by the U.S. EPA as the concentration that is likely to be without an appreciable risk of deleterious effects during a lifetime of exposure. Thus, while odor may be detected from time to time, this does not mean that a health risk is associated with those odors.

## **C. Historical Odor Conditions at Other Facilities**

Sea Ray Plant has operated in their present location in the Merritt Island community for over 27 years. While odor complaints have occasionally been received, they are irregular short term events generally related to specific weather conditions. The low level at which styrene can be detected by odor is much less than the level associated with any health effects. Therefore, this information suggests that the air modeling data are a reasonable representation of conditions at and near the plant site.

## V. SUMMARY AND CONCLUSIONS

In response to concerns that have been expressed regarding the potential health risks that may be associated with air emissions of styrene from the proposed Cape Canaveral plant of Sea Ray Boats, Inc., modeling and risk evaluation activities have been conducted. Long term and shorter term projected air concentrations are in the range where some odor may be detectable from time to time at or beyond the property boundary. However, in all instances the projected styrene air concentrations are well below those which would cause any health effects to local residents, including potentially more sensitive individuals.

## VI. REFERENCES CITED

- ACGIH (American Conference of Governmental Industrial Hygienists). 1991. Documentation of the Threshold Limit Values and Biological Exposure Indices. ACGIH, Cincinnati, OH.
- ACGIH (American Conference of Governmental Industrial Hygienists). 1999. Guide to Occupational Exposure Values - 1999. ACGIH, Cincinnati, OH.
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**APPENDIX A**  
**Calculations and Conversion Factors**

## CONVERSION OF MEASUREMENT UNITS FOR STYRENE

It is important to note that the conversion of units of measure for styrene in air must be carefully reviewed to avoid confusion. Although for some airborne chemicals the units of parts per million and milligrams per cubic meter of air are equivalent or nearly so, that is not true for styrene. The conversion factors for styrene are such that 1 ppm is equivalent to 4.25 mg/m<sup>3</sup>, and 1 mg/m<sup>3</sup> is equivalent to 0.235 ppm (or 235 ppb), based on the chemically based formula for converting units (Williams and Burson, 1985). This conversion of units is based on the following relationship:

$$\text{ppm} = \frac{(\# \text{ mg/m}^3) \times 24.5}{\text{MW}}$$

where:

ppm	=	parts per million in air;
mg/m <sup>3</sup>	=	milligrams per cubic meter;
24.5	=	amount (liters) of vapor per mole of contaminant at 25°Centigrade and atmospheric pressure (760 mm Hg); and,
MW	=	molecular weight of the compound (104 g/mol).



## CALCULATIONS USED IN ADJUSTING DOWNWARD THE U.S. EPA REFERENCE CONCENTRATION

The No Observed Adverse Effect Level identified in the U.S. EPA study was  $94 \text{ mg/m}^3$ , or approximately 22,100 ppb, and that value was adjusted downward to account for potential differences between occupational vs continuous exposures by conservatively correcting the NOAEL to  $34 \text{ mg/m}^3$ , or approximately 8,010 ppb.

The adjustment from  $94 \text{ mg/m}^3$  to  $34 \text{ mg/m}^3$  is based on comparison between a 5 day workweek and a full 7 day week ( $5/7 = 0.71$ ) and a comparison between the occupational inhalation rate ( $10 \text{ m}^3/\text{day}$ ) vs a daily estimated inhalation rate for the general population ( $20 \text{ m}^3/\text{day}$ ).

The adjustment is expressed as  $(5/7) \times (10/20) \times 94 \text{ mg/m}^3 = 34 \text{ mg/m}^3$ .

$34 \text{ mg/m}^3$  is equal to 8010 ppb according to the following calculation:

$$\text{ppb} = \frac{34,000 \times 24.5}{104}$$

$$\text{ppb} = 8,010$$

## SOURCE FOR THE FDEP ARC's

The source for the 8-hour and 24-hour ARCs is the occupational exposure level (OEL) set by either the ACGIH or OSHA.

The 8-hour value is the OEL (in this case 50 ppm for styrene) divided by a safety factor of 100.

The 24-hour value is the OEL (in this case 50 ppm for styrene) divided by a safety factor of 420.

These safety factors have been applied to the OELs to protect the public, who may be more sensitive than workers to these chemicals and who could be exposed for a longer period of time (FDEP, 1995).

**APPENDIX B**

**Tables**

Table 1

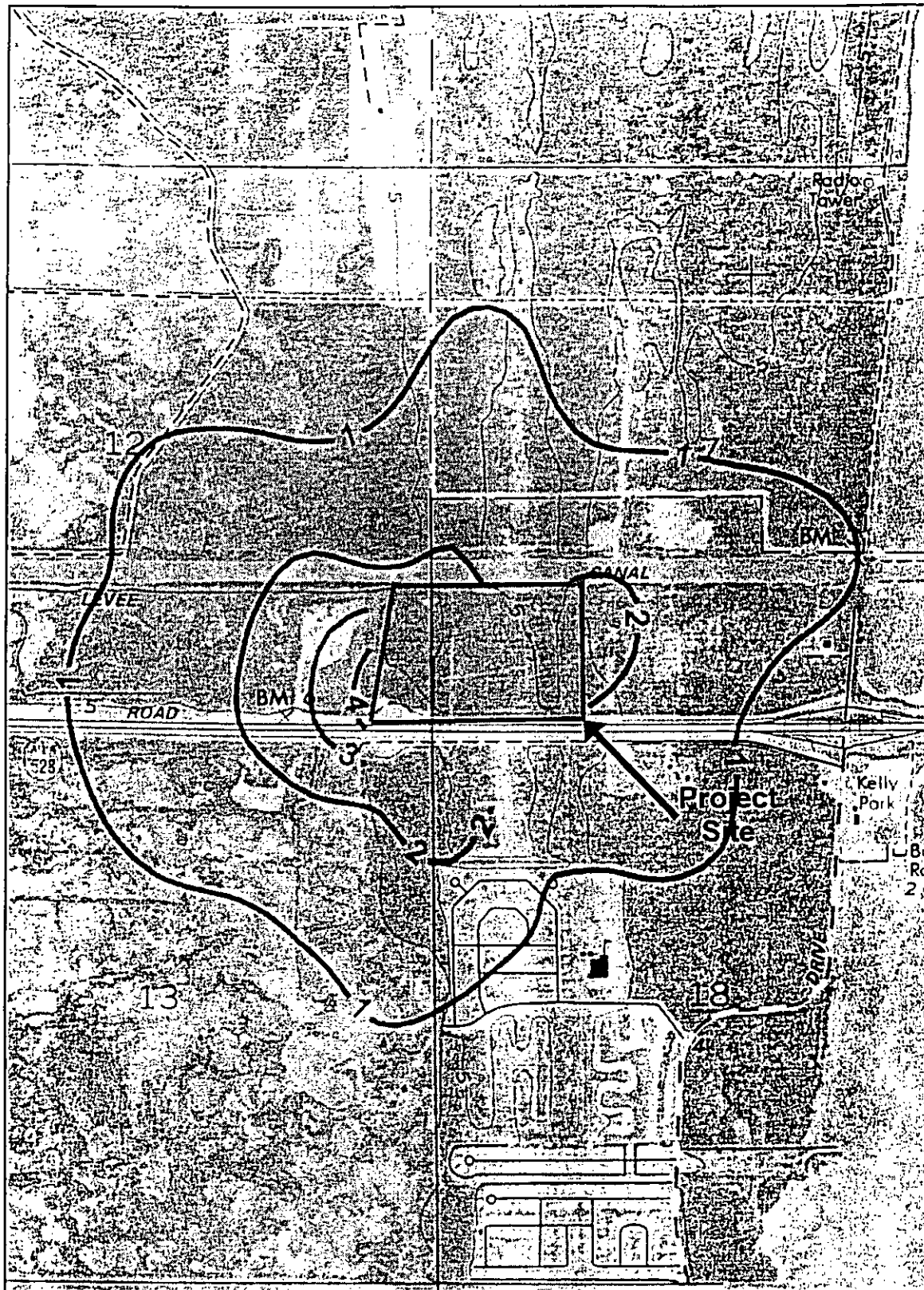
**Maximum Predicted Concentrations of Styrene Emissions  
Sea Ray Boats, Inc. Cape Canaveral Plant**

<b>Averaging Period</b>	<b>5 Year Meteorology Period</b>	<b>Site Boundary (ppb)</b>	<b>Residential Boundary (ppb)</b>	<b>U.S. EPA Reference Concentration (ppb)</b>	<b>FDEP ARC Value (ppb)</b>
<b>Annual</b>	Year 1	5.4	3.5	235.0	235.0
	Year 2	5.2	3.4	235.0	235.0
	Year 3	4.3	2.8	235.0	235.0
	Year 4	6.2	3.1	235.0	235.0
	Year 5	5.6	2.7	235.0	235.0
	<i>Average</i>		5.3	3.1	
<i>Maximum</i>		6.2	3.5		
<b>24-hour</b>	Year 1	62.9	40.7	Not Applicable	119.2
	Year 2	74.2	46.2	Not Applicable	119.2
	Year 3	57.2	45.3	Not Applicable	119.2
	Year 4	58.5	33	Not Applicable	119.2
	Year 5	66.8	44.2	Not Applicable	119.2
	<i>Average</i>		63.9	41.9	
<i>Maximum</i>		74.2	46.2		
<b>8-hour</b>	Year 1	95.1	61.5	Not Applicable	500.6
	Year 2	91.3	63.2	Not Applicable	500.6
	Year 3	97.4	62.9	Not Applicable	500.6
	Year 4	101.5	67.7	Not Applicable	500.6
	Year 5	99.5	73	Not Applicable	500.6
	<i>Average</i>		97	65.7	
<i>Maximum</i>		101.5	73		

Source: Golder Associates, 1999.

**APPENDIX C**

**Figures**



HSWMR Hazardous Substance & Waste Management Research, Inc.		
DATE: 12-13-99	Figure 1	
Annual Average Air Concentration (ppb) in Vicinity of Sea Ray Boats, Inc., Cape Canaveral Plant		
MAP SUPPLIED BY: Golder Associates, Inc.		
DATE OF MAP: 1999	SCALE: As Shown	

Figure 2

Comparison of Annual Average Styrene Concentrations with Health-Based Guidelines

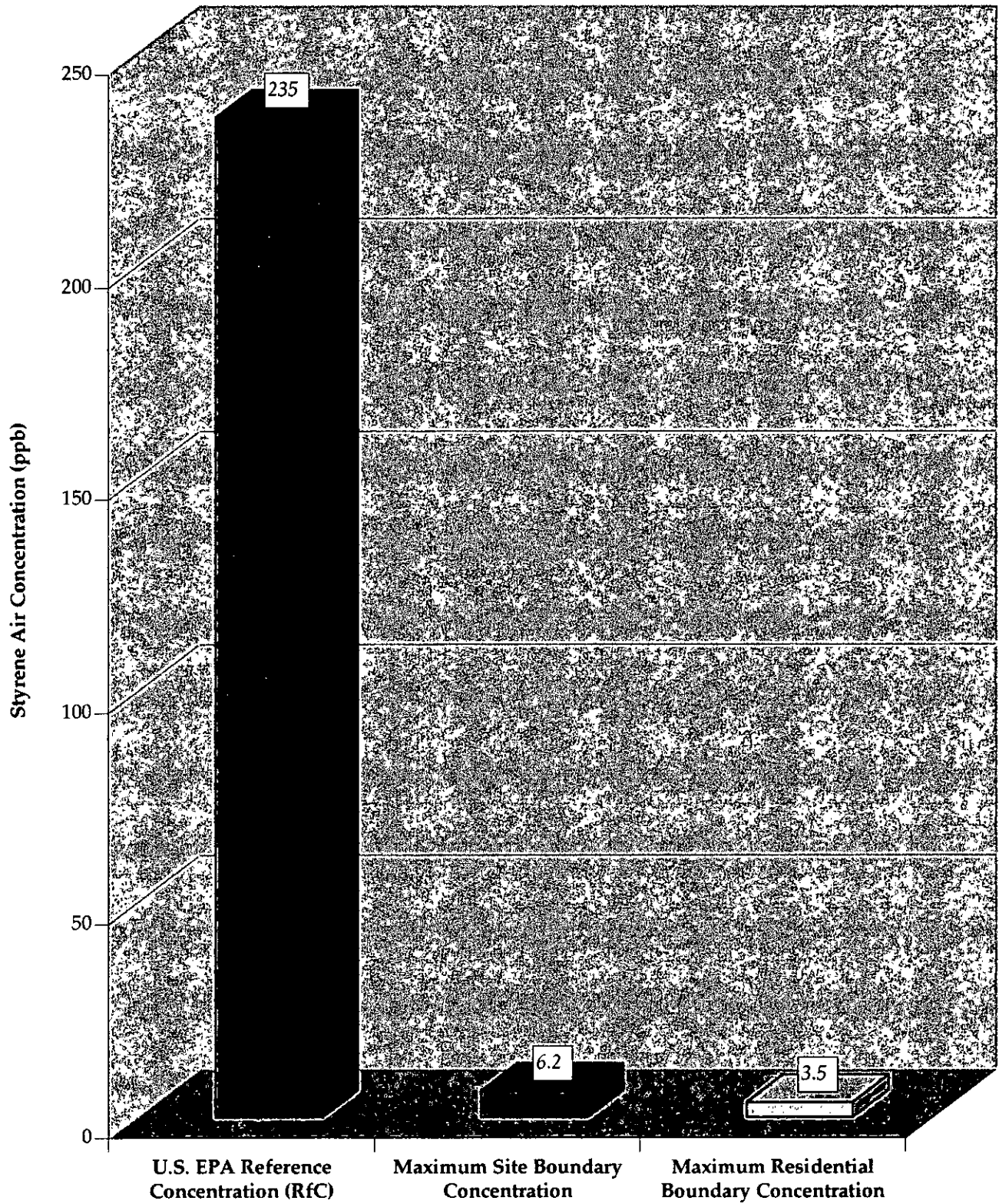


Figure 3

Comparison of 8-Hour Average Styrene Concentrations with Health-Based Guidelines

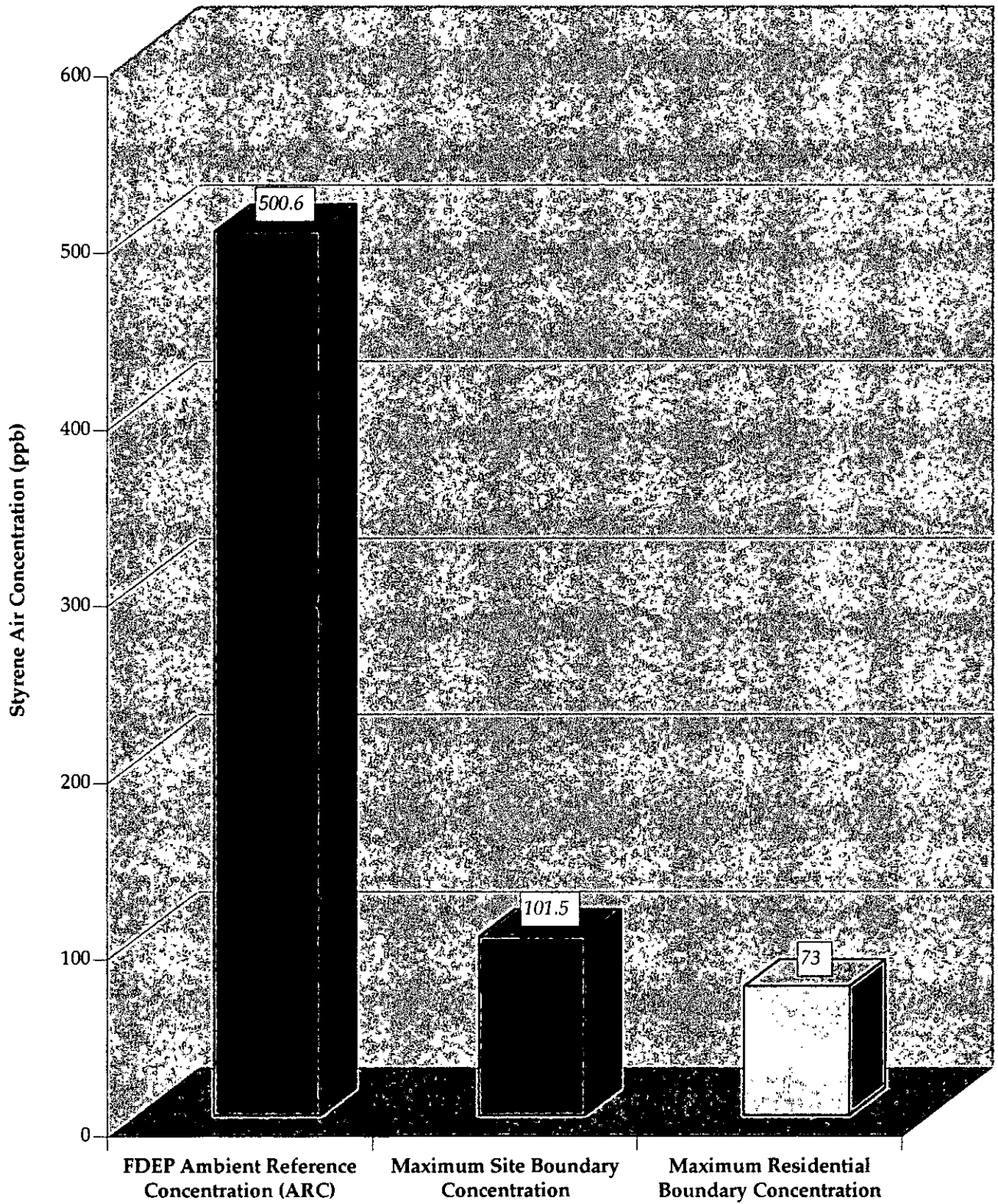
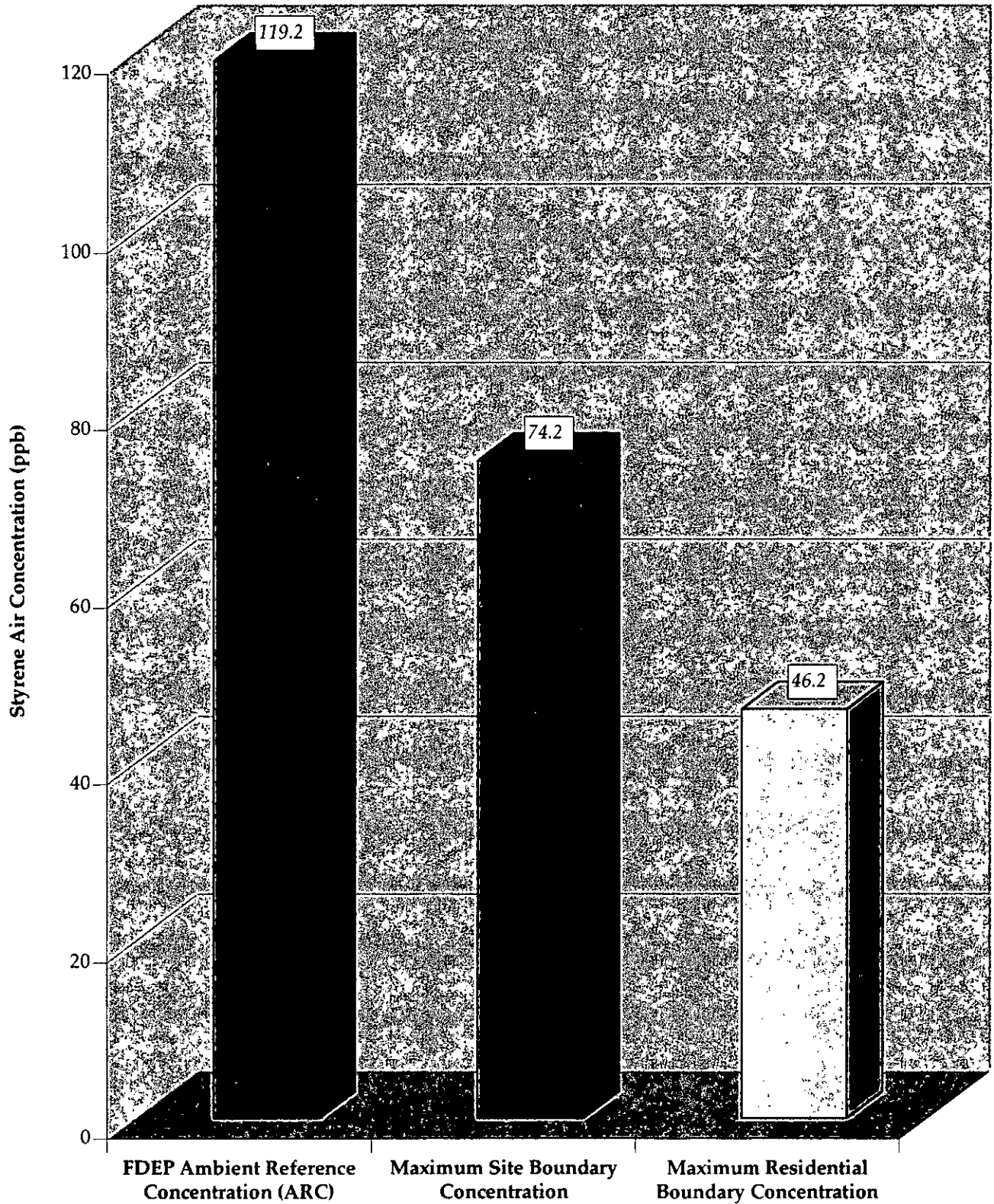




Figure 4

Comparison of 24-Hour Average Styrene Concentrations with Health-Based Guidelines



December 12, 1999

Mr. Al Linero, P.E. Administrator  
Florida Department of Environmental Protection  
Bureau of Air Regulation  
2600 Blair Stone Road, MS 5505  
Tallahassee, FL 32399-2400

RECEIVED

DEC 14 1999

BUREAU OF AIR REGULATION

Dear Mr. Linero:

This letter highlights a community petition to stop Sea Ray Boats from obtaining an Air Construction Permit for their proposed Cape Canaveral Plant. Your urgent attention is needed in this matter.

Attached are several things:

1. Attached are some aerial photographs of the proposed Sea Ray site and the nearby neighborhoods. These were taken December 1, 1999. **You can see how absurd the location is for a major (Title V) pollutor.** The proposed site is surrounded by residential neighborhoods and schools. On common sense alone, this should lead you to deny the permit.
2. **Attached are 330 signatures petitioning to deny the permit.** These signatures are from neighborhoods surrounding the proposed plant as well as the existing plants. Each of the signators read this carefully and understood what they were signing it. We all take this issue seriously and believe the permit should be denied. Give it full consideration. Perhaps more telling than the signatures is that only one person refused to sign on the grounds that they disagree (some people agreed but refused to sign because friends work at Sea Ray). **That's 330 to 1 against Sea Ray's pollution and 330 to 1 against the Air Construction Permit.**
3. Attached is newspaper article from December 11, 1999 that shows Sea Ray's indifference to compliance. **Sea Ray has been caught building without a permit.** The DEP instructions on building the lamination plant were clear and repeated at the public meeting on November 17. In addition, Sea Ray has done nothing to respond to the local community's complaints on the objectionable odor from its existing facilities. In addition, Sea Ray has lobbied the DEP continuously for reduced emissions restrictions in the Air Construction Permit. **These key items clearly show that diligent compliance to any permit guidelines cannot be expected from Sea Ray.**
4. **Attached is your first hand report on the "objectionable odor and irritant" emanating from the existing facility.** This internal DEP documentation of the smell is very telling. Clearly the local residents are not being hysterical. This odor and irritant must not be expanded to the new facility.

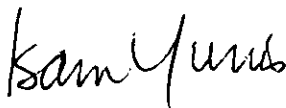
**The residents of Merritt Island remain united: We insist on clean and fresh and healthy air.** This means no odors and no irritants and no health hazards. Sea Ray and the DEP have not demonstrated that this demand can be met. We do not want to be lab rats while Sea Ray experiments with different controls. This is especially true given Sea Ray's demonstrated lack of interest in the regulations and the community welfare.

**Our basic demand is that Sea Ray demonstrate, at its existing facility, that it can meet the community's requirement for clean, fresh, and healthy air. Given Sea Ray's lack of interest in environmental control, any analytic modeling is idealist and invalid. Without a proven demonstration, we insist the permit be denied.**

Sea Ray has brought this result upon itself as they continue to build and pollute around residential areas. Sea Ray will get no sympathy from us and should get none from you. Thank you for your support.

You may address any response and questions to Isam Yunis at 1160 Grand Cayman Drive, Merritt Island, FL 32899 or [yunis1965@aol.com](mailto:yunis1965@aol.com) or 407-459-2725.

On behalf of 330 Brevard County residents,



Isam Yunis

Attachments:	Original:	File
	Cc:	DEP/J. Reynolds
		DEP/C. Fancy
		DEP/K. Green
		DEP/D. Struhs
		EPA/District 4
		Gov/J. Bush
		State/W. Posey
		County/R. O'Brien
		Zoning/B. Osborne

December 12, 1999

Mr. Clair Fancy, Chief  
Florida Department of Environmental Protection  
Bureau of Air Regulation  
2600 Blair Stone Road, MS 5505  
Tallahassee, FL 32399-2400

RECEIVED  
DEC 14 1999  
BUREAU OF AIR REGULATION

Dear Mr. Fancy:

This letter highlights a community petition to stop Sea Ray Boats from obtaining an Air Construction Permit for their proposed Cape Canaveral Plant. Your urgent attention is needed in this matter.

Attached are several things:

1. Attached are some aerial photographs of the proposed Sea Ray site and the nearby neighborhoods. These were taken December 1, 1999. **You can see how absurd the location is for a major (Title V) pollutor.** The proposed site is surrounded by residential neighborhoods and schools. On common sense alone, this should lead you to deny the permit.
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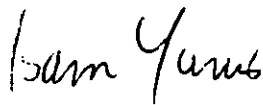
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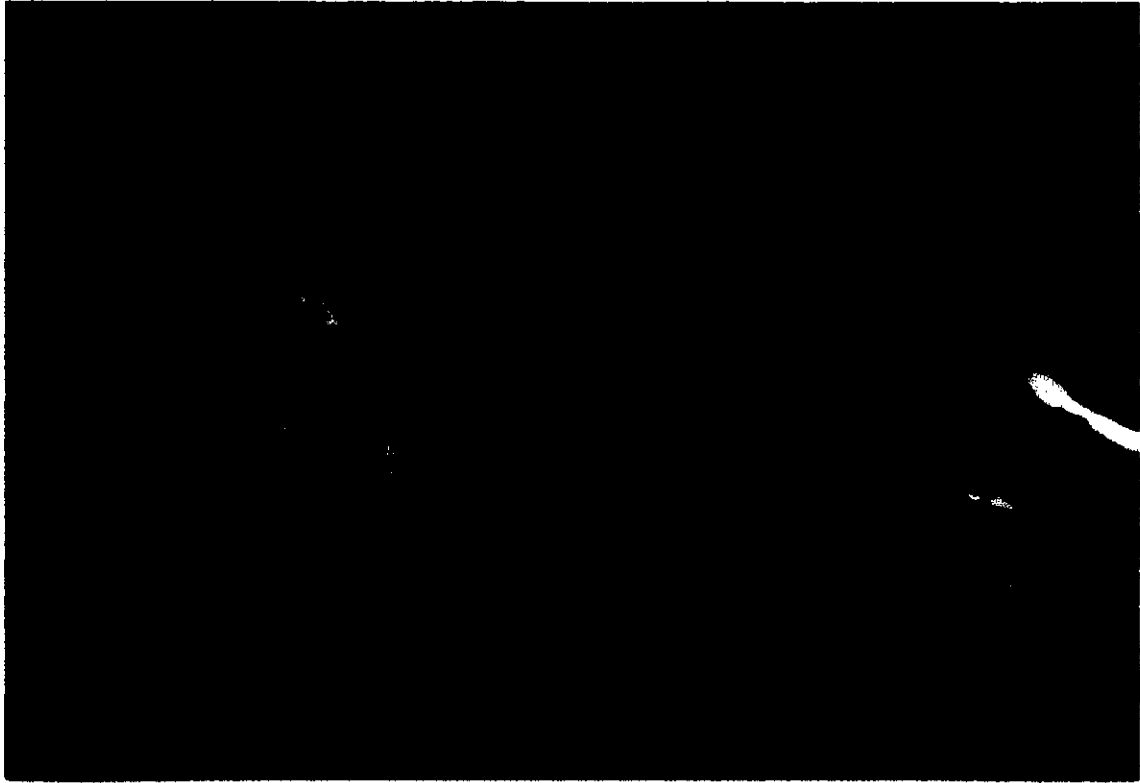
On behalf of 330 Brevard County residents,



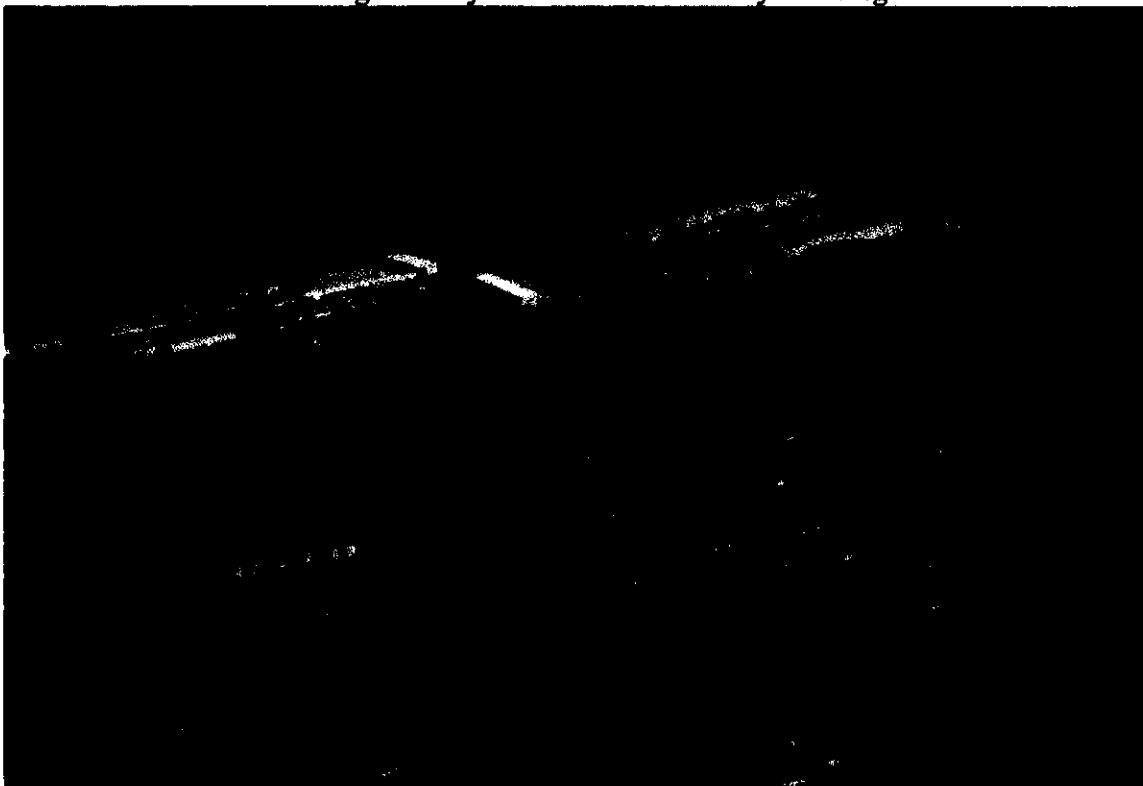
Isam Yunis

Attachments: Original: File  
Cc: DEP/J. Reynolds  
DEP/A. Linero  
DEP/K. Green  
DEP/D. Struhs  
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Gov/J. Bush  
State/W. Posey  
County/R. O'Brien  
Zoning/B. Osborne

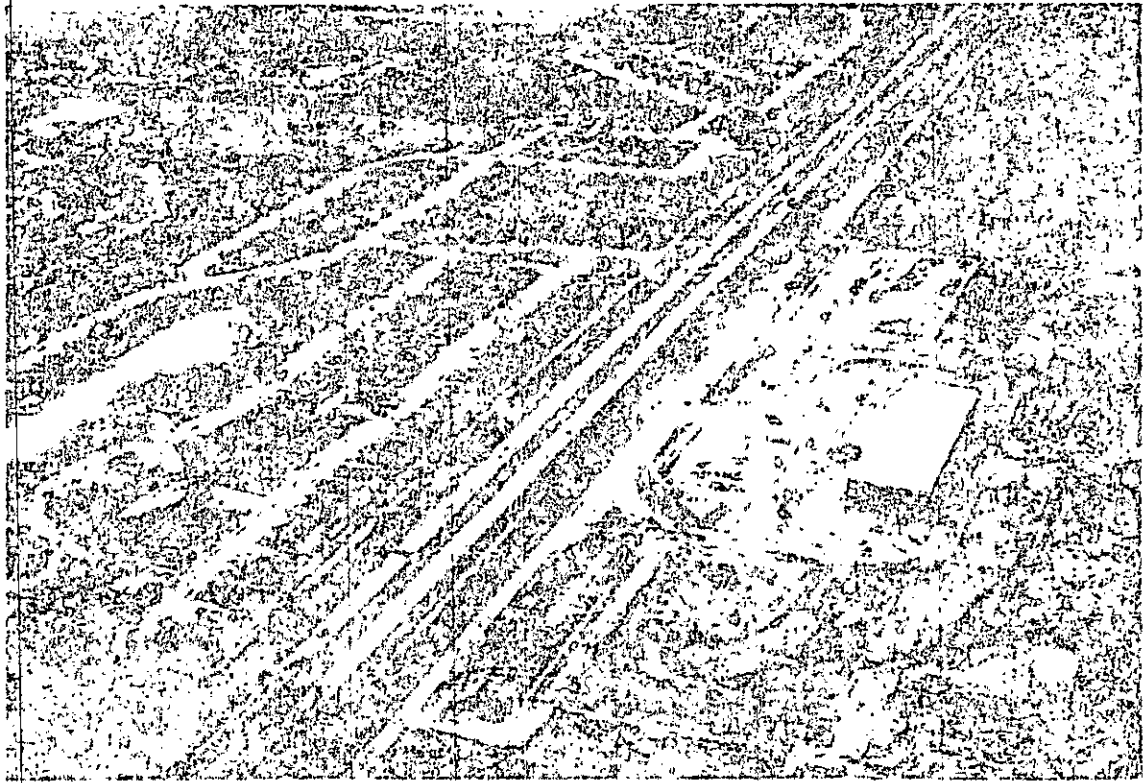
**Sea Ray Plant Already Under Construction Across From Existing Housing and Elementary School**



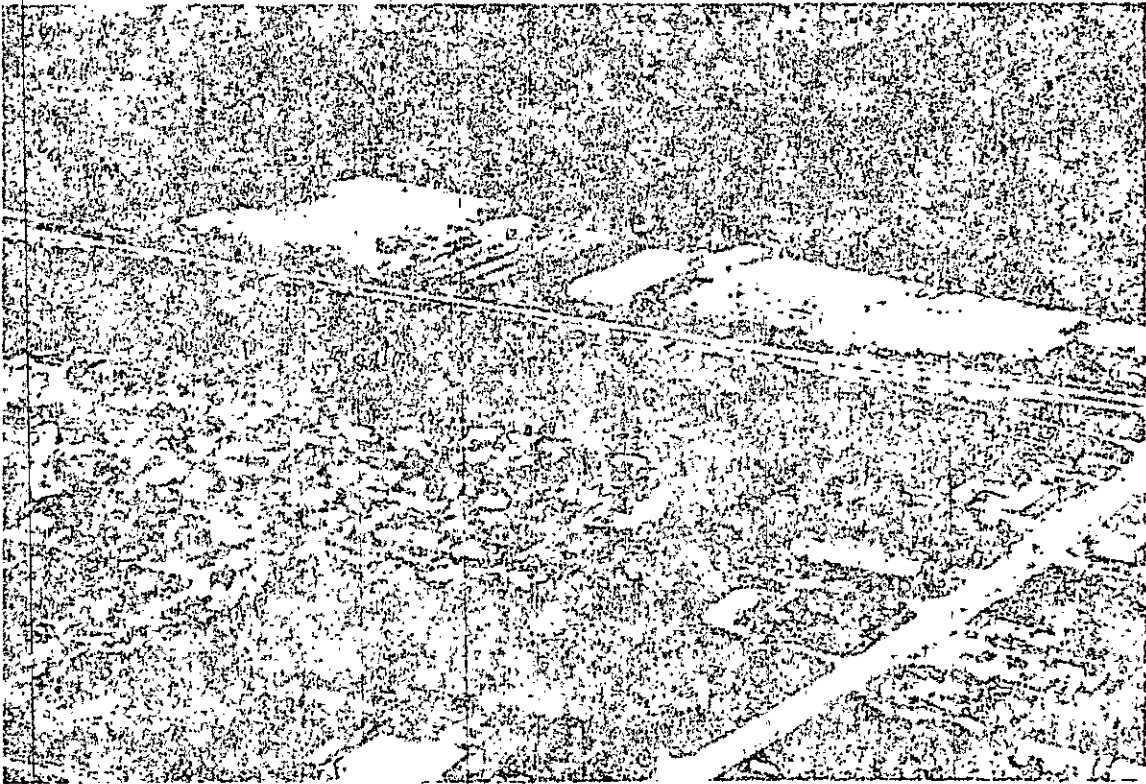
**Existing Sea Ray Facilities with Nearby Housing**



1950年10月10日 中国科学院地质研究所 地质研究所



1950年10月10日 中国科学院地质研究所 地质研究所



December 1999:

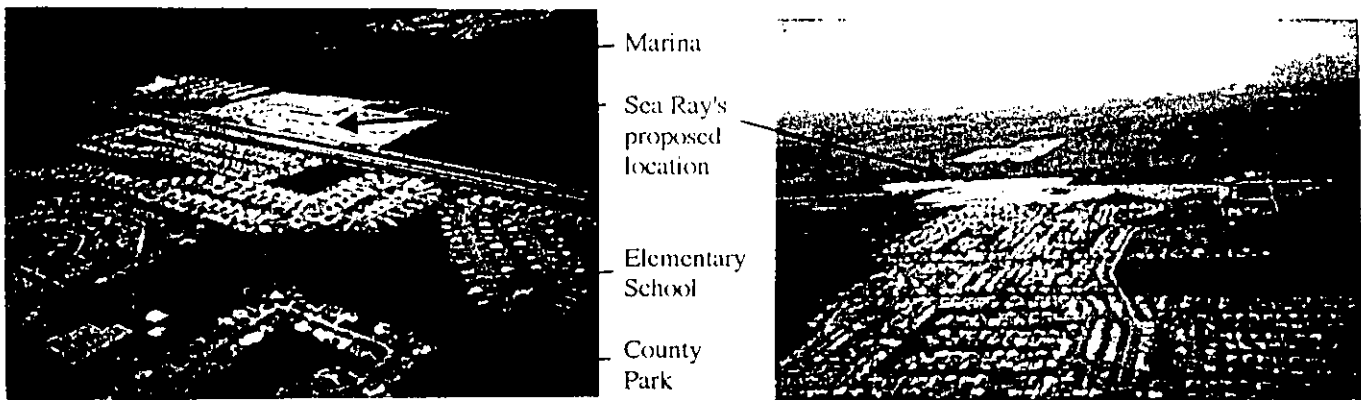
We, the undersigned residents of Florida, insist that the Department of Environmental Protection (DEP) deny an Air Construction Permit for Sea Ray Boats' proposed new facility on Merritt Island.

We, the existing residents of Florida, ask the Governor to intervene to ensure that his executive agency (DEP) protects the health and welfare of Florida residents.

We, the residents of Brevard County, insist that local representatives, commissioners, and zoning officials enforce Sea Ray Boats' zoning; this means no noxious odor of styrene.

We believe the above actions are required because:

- Sea Ray's own impact analysis (by Golder Associates) shows they cannot meet DEP or zoning requirements (DEP Sec 11(b), Zoning Sec. 62-1542).
- Zoning exemptions were required for Sea Ray to even propose the new Merritt Island facility.
- Sea Ray's proposed facility, near existing homes, parks, and schools, is a ludicrous location for a major (Title V) source of hazardous air pollutants.



We seriously consider the issuance of the Sea Ray Air Construction Permit a failure in protection of the "comfortable use and enjoyment of life or property" [Sec. 11(b)].

	Name	Address	Signature
1.	<u>Ardath Griffin</u>	<u>1170 Grand Cayman Dr. Merritt Island</u>	<u>Ardath Griffin</u>
2.	<u>Angela Woodson</u>	<u>1040 Needle Blvd. Merritt Island, FL</u>	<u>Angela Woodson</u>
3.	<u>Elizabeth Robinson</u>	<u>1250 Grand Cayman Dr. Merritt Island, FL</u>	<u>Elizabeth Robinson</u>
4.	<u>Melissa Leach</u>	<u>11075 S. Shelton Tr. Merritt Island</u>	<u>Melissa Leach</u>
5.	<u>E. David Griffin</u>	<u>1170 Grand Cayman Dr. Merritt Island</u>	<u>E. David Griffin</u>
6.	<u>Nancy K. Wilke</u>	<u>1150 Grand Cayman Dr. Merritt Island</u>	<u>Nancy K. Wilke</u>
7.	<u>Gregory D. Wilke</u>	<u>1150 Grand Cayman Dr. M.I.</u>	<u>Gregory D. Wilke</u>
8.	<u>Richard J. Gal</u>	<u>1180 Grand Cayman Dr. M.I.</u>	<u>Richard J. Gal</u>
9.	<u>Connie M. Gal</u>	<u>1180 Grand Cayman Dr. M.I.</u>	<u>Connie M. Gal</u>
10.	<u>Caemine Pollock</u>	<u>1111 Grand Cayman Dr. M.I.</u>	_____



December 1999:

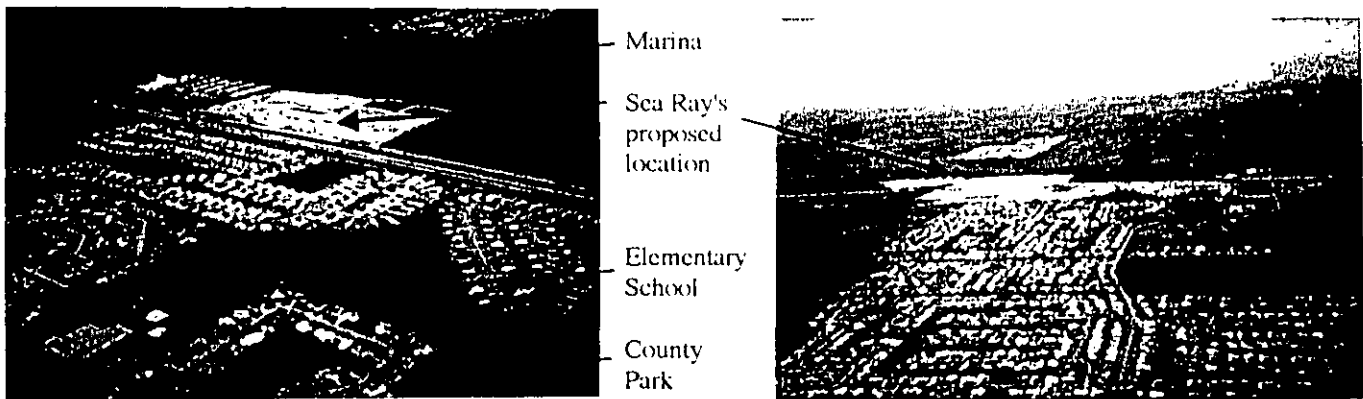
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Name	Address	Signature
1. <u>JAMES W. T. P. [unclear]</u>	<u>1171 GRAND CAYMAN DR</u>	<u>[Signature]</u>
2. <u>Mary Lou Taylor</u>	<u>1171 GRAND CAYMAN DR</u>	<u>[Signature]</u>
3. <u>Don Treibley</u>	<u>1181 GRAND CAYMAN DR</u>	<u>[Signature]</u>
4. <u>SUSAN TREIBLEY</u>	<u>1181 GRAND CAYMAN DR</u>	<u>[Signature]</u>
5. <u>FRAN CARLSON</u>	<u>420 BRADLEY DR</u>	<u>[Signature]</u>
6. <u>FLORIN LEVIAR</u>	<u>1201 GRAND CAYMAN DR</u>	<u>[Signature]</u>
7. <u>Heather Mills</u>	<u>1231 GRAND CAYMAN DR</u>	<u>[Signature]</u>
8. <u>Dionica Wiesmann-Hirschert</u>	<u>1241 GRAND CAYMAN DR</u>	<u>[Signature]</u>
9. <u>Ernest Hirschert</u>	<u>1241 GRAND CAYMAN DR</u>	<u>[Signature]</u>
10. <u>Douglas Bean</u>	<u>1251 GRAND CAYMAN DR</u>	<u>[Signature]</u>

December 1999:

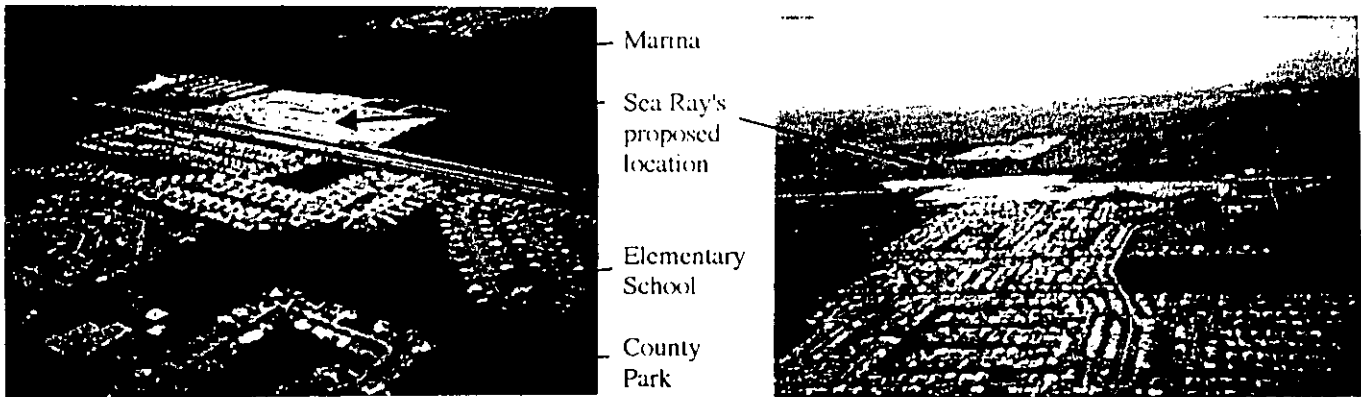
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We seriously consider the issuance of the Sea Ray Air Construction Permit a failure in protection of the "comfortable use and enjoyment of life or property" [Sec. 11(b)].

	Name	Address	Signature
1.	Susan L. Brown	1251 Grand Cayman Drive	Susan L. Brown
2.	Shannon Sheel	1261 Grand Cayman Dr	Shannon Sheel
3.	ROBT DUBILIER	1271 GRAND CAYMAN DR	Robt Dubilier
4.	Karen Dubilier	1271 Grand Cayman Dr	Karen Dubilier
5.	Nona Baker	1281 Grand Cayman Dr	Nona Baker
6.	Boris Vasilovich	1261 GRAND CAYMAN DR	Boris Vasilovich
7.	James R. Robinson	1280 Grand Cayman Dr.	James R. Robinson
8.	NICOPOLUS A. GIGLIO JR	1250 GRAND CAYMAN DR	Nicopolus A. Giglio Jr
9.	Lester Giglio	1230 Grand Cayman Dr.	Lester Giglio
10.	FRED NEVERS	1220 GRAND CAYMAN DR	Fred Nevers

December 1999:

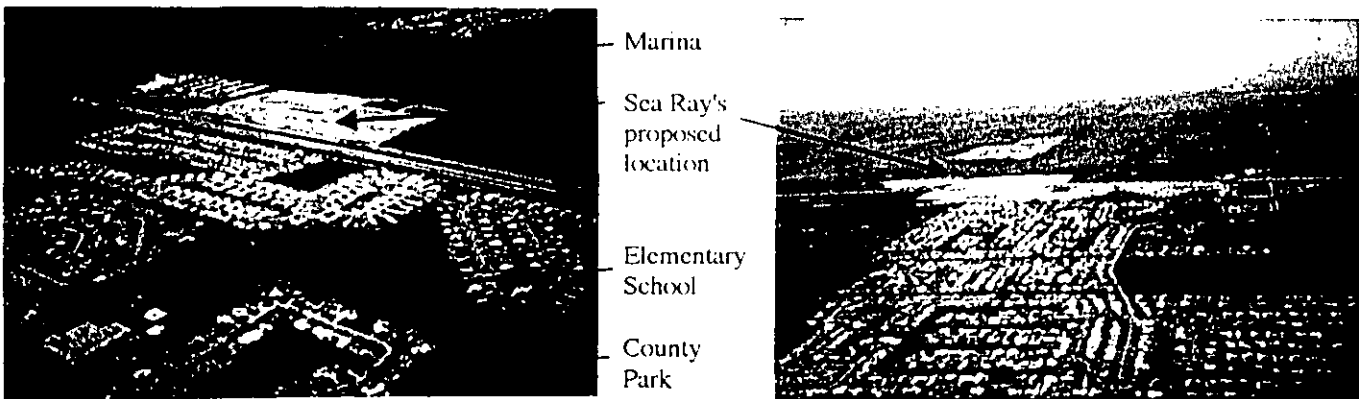
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Name	Address	Signature
1. <u>Andy Latheraw</u>	<u>1277 Potomac Drive MI 32952</u>	
2. <u>Deborah Latheraw</u>	<u>1277 Potomac Dr, MI 32952</u>	
3. <u>S. MOYER</u>	<u>1280 Potomac Drive MI</u>	
4. <u>S. Barrette-Moye</u>	<u>1280 Potomac Drive MI 32952</u>	
5. <u>Marion T. Brady</u>	<u>1282 Potomac DR. MI 32952</u>	
6. <u>James T. Brady</u>	<u>1282 Potomac Dr MI 32952</u>	
7. <u>F. BREW</u>	<u>1279 Potomac Dr MI 32952</u>	
8. <u>W. MALLIS</u>	<u>1281 Potomac Dr.</u>	
9. <u>Michelle Johnson</u>	<u>1283 Potomac Dr.</u>	

December 1999:

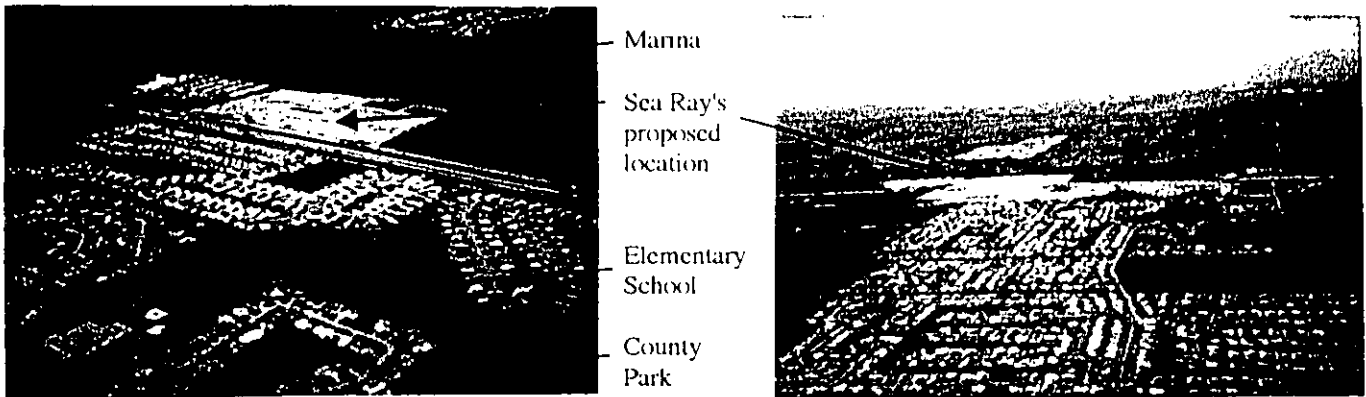
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	Name	Address	Signature
1.	Elena Monteiro	1234 Potomac Dr, MI 32952	Elena Monteiro
2.	Sean Flaherty	1230 Potomac Dr.	Sean Flaherty
3.	Cindy Flaherty	1230 Potomac Dr MI 32952	Cindy Flaherty
4.	Ed P. Schff	1239 Potomac Dr MI 32952	Ed P. Schff
5.	Roger Madson	1264 Potomac Dr MI 32952	Roger Madson
6.	Nancy Ann Pickler	1264 Potomac Dr MI 32952	Nancy Ann Pickler
7.	Ed Hamblin	1266 Potomac Dr MI 32952	Ed Hamblin
8.	Michael Hamblin	1266 Potomac Dr MI 32952	M. Thee
9.	Pam Costello	1273 Potomac Dr MI 32952	Pam Costello
10.	Ruthy Whitcomb	1275 Potomac Dr MI 32952	Ruthy Whitcomb

December 1999:

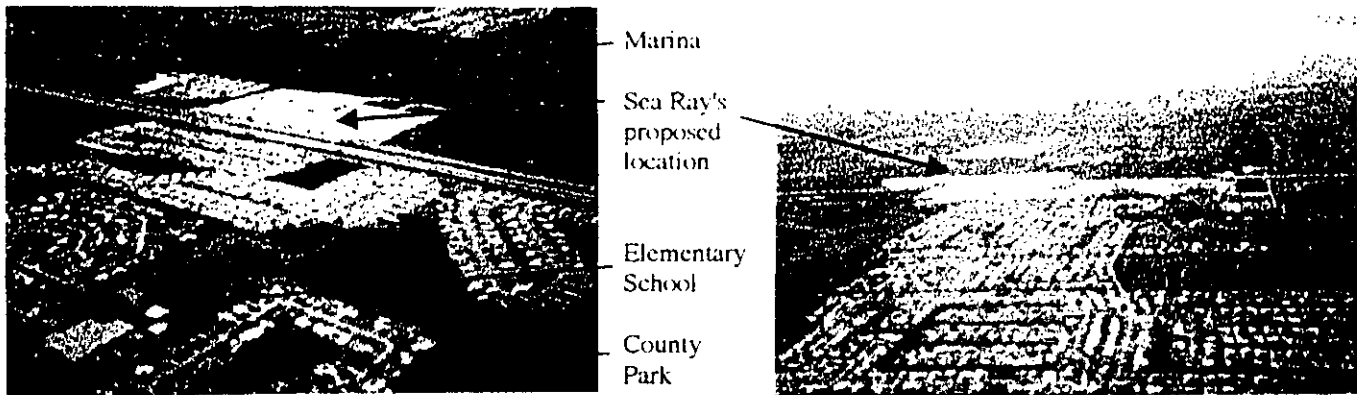
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1.	<u>P. SAEMMER</u>	<u>2555 CASTLE CT - M.I. - 32953</u>	<u>P. Saemmer</u>
2.	<u>L. CHASE</u>	<u>2370 SYRES CREEK DR. MI 32953</u>	<u>L. Chase</u>
3.	<u>J. CHASE</u>	<u>2370 SYRES CREEK DR. MI 32953</u>	<u>John Chase</u>
4.	<u>MARY LOU HARLOW</u>	<u>168 VIA HAVAREE</u>	<u>Mary Lou Harlow</u>
5.	<u>JANET BEARDSLEY</u>	<u>176 VIA HAVAREE</u>	<u>Janet Beardsley</u>
6.	<u>Jeanie McLain</u>	<u>2530 Castle Ct. MI 32953</u>	<u>Jeanie McLain</u>
7.	<u>ROBIE McLAM</u>	<u>2550 CASTLE CT MIS 32953</u>	<u>Robie McLain</u>
8.	<u>SAM MAIUS</u>	<u>2535 CASTLE CT MI 32953</u>	<u>S. Maius</u>
9.	<u>Ruthie Maius</u>	<u>2535 CASTLE CT MI</u>	<u>R. Maius</u>
10.	<u>Margaret Denton</u>	<u>141 Via Havaree</u>	<u>M. Denton</u>

December 1999:

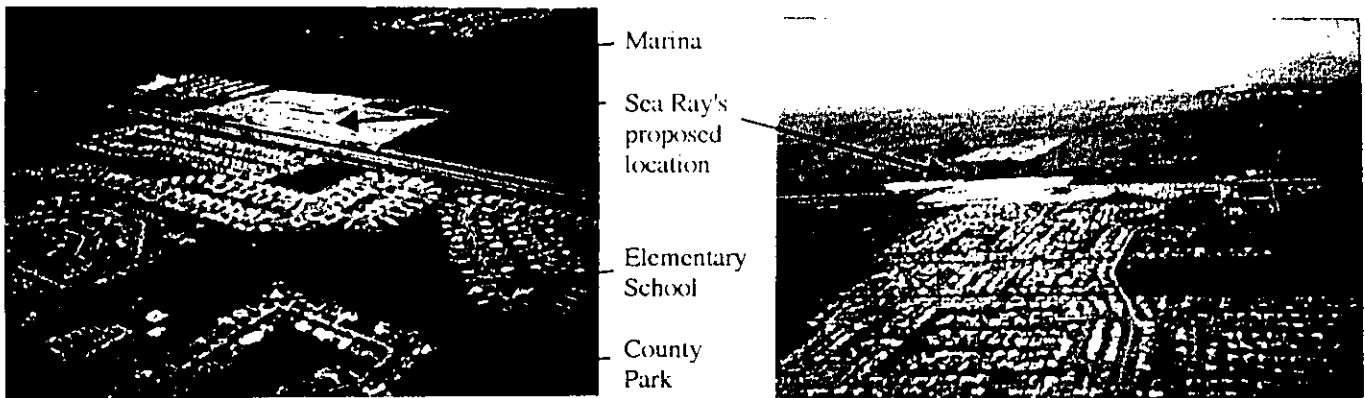
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Name	Address	Signature
1. <u>DAWN P SAWYER</u>	<u>137 VIA HAVARRE</u>	<u>Dawn Sawyer</u>
2. <u>Valerie Hachtel</u>	<u>150 Via De La Reina</u>	<u>Valerie Hachtel</u>
3. <u>ARTHUR D. HACHTEL</u>	<u>150 Via De La Reina</u>	<u>A. D. Hachtel</u>
4. <u>HERMAN J. SKUM BARKS</u>	<u>148 VIA HAVARRE</u>	<u>Herman J. Skum Barks</u>
5. <u>RUSSELL B. BEARDSLEY</u>	<u>176 VIA HAVARRE</u>	<u>Russell B. Beardsley</u>
6. <u>RICHARD J. MELLOH</u>	<u>2519 TULANE DR. COCOA</u>	<u>Richard J. Melloh</u>
7. <u>ROBERT T. DORIS</u>	<u>249 CURACAO DR., COCOA BEACH</u>	<u>Robert T. Doris</u>
8. <u>RONALD L. INGRAHAM</u>	<u>4570 S TROPICAL TRAIL, MERRITT IS</u>	<u>Ronald L. Ingraham</u>
9. <u>VINCENT CHARDER</u>	<u>4315 CROFTWOOD FL COCOA</u>	<u>Vincent Charder</u>
10. <u>NANCY PALMETER</u>	<u>370 ARTEMIS BLVD MERRITT IS</u>	<u>Nancy Palmeter</u>

December 1999:

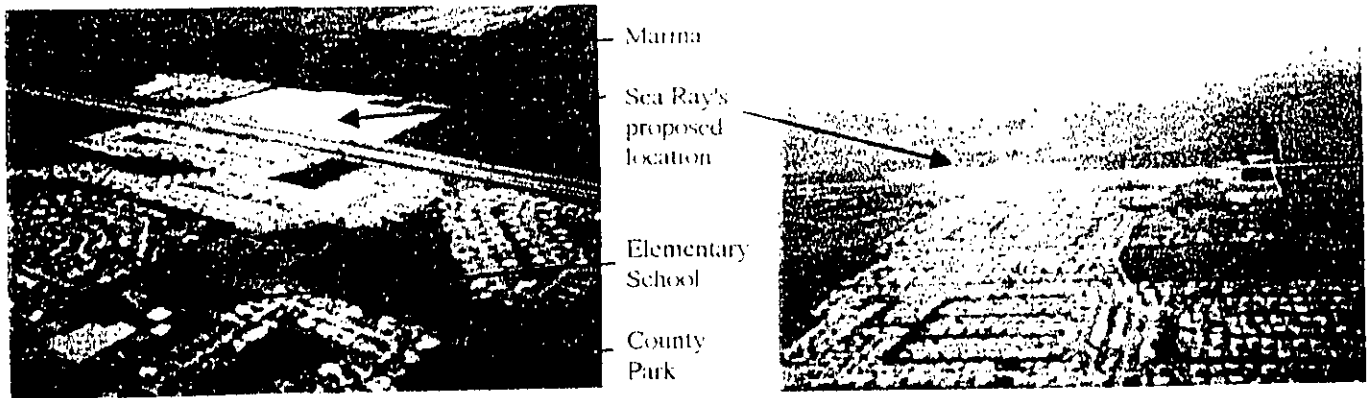
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	Name	Address	Signature
1.	Bob Page	249 Via Havanna	<i>[Signature]</i>
2.	Ken Ruvell	230 MALAGA CRT	<i>[Signature]</i>
3.	Ake D. Long	1800-4-2365 SYKES CREEK DR. DR. 10	<i>[Signature]</i>
4.	Walter Long	2390 SYKES CREEK DR.	<i>[Signature]</i>
5.	Diana Samuel	701 N. Carolina #433	
6.	Ruler Foster	2390 Sykes creek DR.	<i>[Signature]</i>
7.	Frances Stevens	200 Caroleen Ct	<i>[Signature]</i>
8.	Alfred Stone	200 Caroleen Ct	<i>[Signature]</i>
9.	CHP FATCH	215 Caroleen Ct 107	<i>[Signature]</i>
10.	M. C. Armstrong	324 S. Tropical Trl. ME	

December 1999:

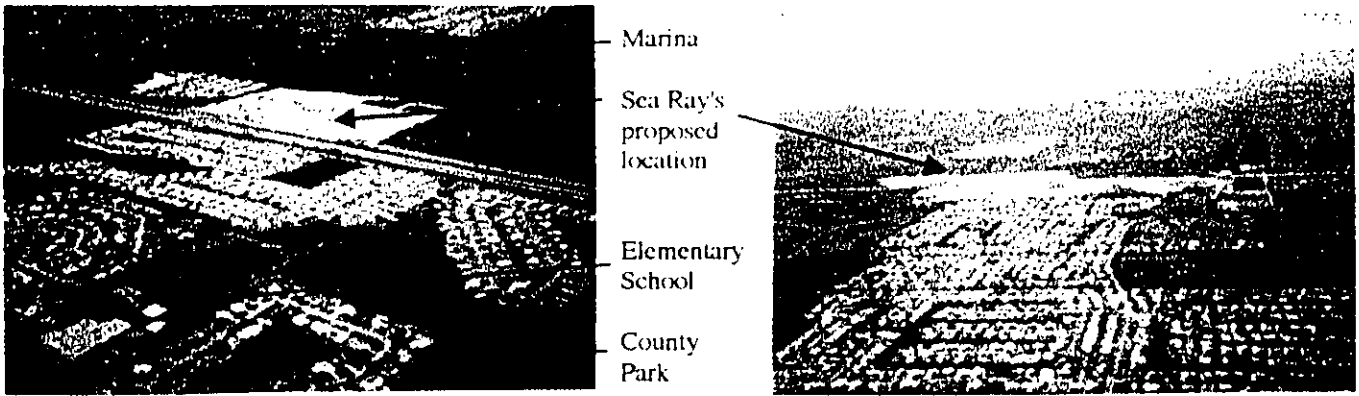
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Name	Address	Signature
1. <u>Andrew Gunn Cassone</u>	<u>220 Madrid Ct Merritt Island FL</u>	<u>Andrew Cassone</u>
2. <u>Patricia Seipel</u>	<u>260 Madrid Ct, Merritt Island, FL</u>	<u>Patricia Seipel</u>
3. <u>Don Smith</u>	<u>260 MADRID CT, MERRITT IS</u>	<u>Don Smith</u>
4. <u>Richard Brown</u>	<u>260 MADRID CT, MI, FL</u>	<u>Richard Brown</u>
5. <u>Ruth Warden</u>	<u>2320 Sycamore Creek Dr Merr</u>	<u>Ruth Warden</u>
6. <u>Paul C. Hall</u>	<u>2350 Sycamore Creek Dr Merr</u>	<u>Paul C. Hall</u>
7. <u>J. W. MacDonell</u>	<u>220 Cypress Ct MI, FL</u>	<u>J. W. MacDonell</u>
8. <u>Thomas Henry Hill</u>	<u>240 Gordon Ct MI, FL</u>	<u>Thomas Henry Hill</u>
9. <u>E. O. Dell</u>	<u>275 Gordon Ct MI, FL</u>	<u>E. O. Dell</u>
10. <u>ADDY</u>	<u>" "</u>	<u>ADDY</u>



December 1999:

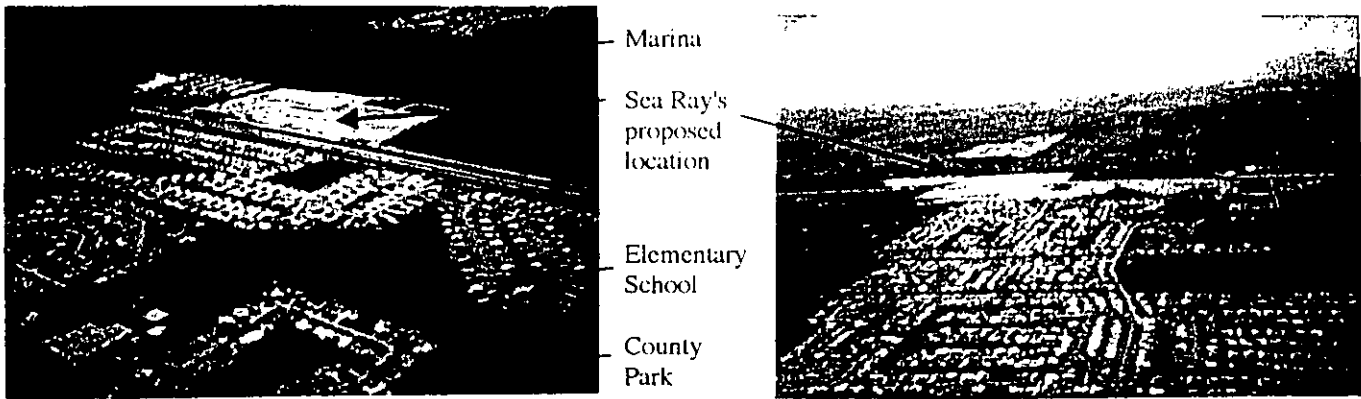
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Name	Address	Signature
1. Jean P. Berqine	403 Palh Ave CC FL	Jean P. Berqine
2. Pauline T. Parker	114 Via De La Reina MI	Pauline T. Parker
3. MARY LOU STANTON	110 VIA DELA REINA MI	M. L. Stanton
4. Virginia Taylor	114 Via De La Reina MI FL	V. Taylor
5. Gary C. Taylor	114 Via De La Reina MI FL	G. Taylor
6. Laura Takai	113 Via de la Reina, M.I. FL	Laura Takai
7. Thomas Wix	113 Via de la Reina, M.I. FL	Tom S. Wix
8. Deborah Carter	111 Via De la Reina, MI FL	Deborah Carter
9. MARY LOU STANTON	110 VIA DELA REINA MI	M. L. Stanton
10. PAT WICK	110 Via De La Reina, MI, FL	PAT WICK

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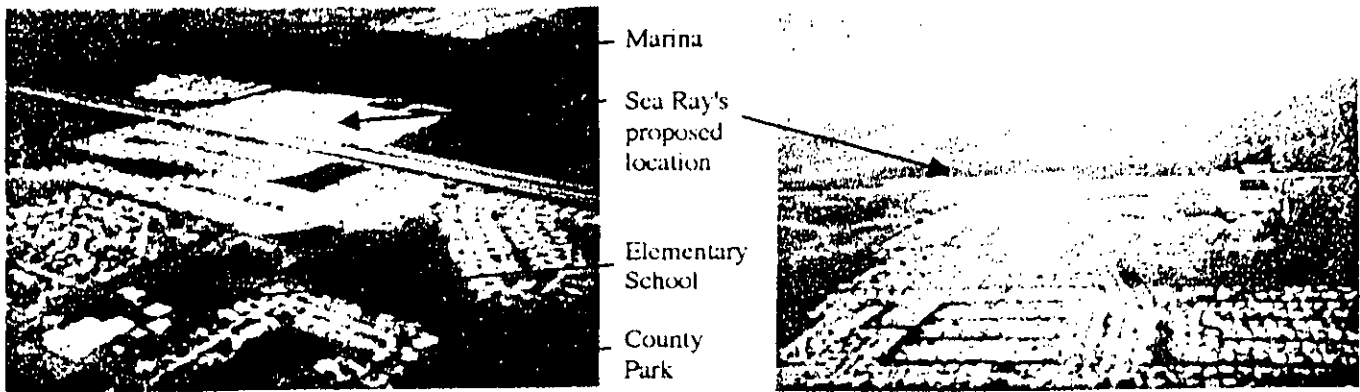
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1.	<u>VERNON FULLER</u>	<u>133 VIA HAVARRE</u>	<u>Vernon Fuller</u>
2.	<u>JOHANNIE M. FULLER</u>	<u>133 VIA HAVARRE</u>	<u>Johannie M. Fuller</u>
3.	<u>William G. Franklin</u>	<u>132 Via Havarre</u>	<u>William G. Franklin</u>
4.	<u>T. JAMES SNYDER</u>	<u>129 VIA HAVARRE</u>	<u>T. James Snyder</u>
5.	<u>KATHY CUCHA</u>	<u>128 VIA HAVARRE</u>	<u>Kathy Cucha</u>
6.	<u>Victor CUCHA</u>	<u>128 VIA HAVARRE</u>	<u>Victor Cucha</u>
7.	<u>WITA BARRIA</u>	<u>129 VIA HAVARRE</u>	<u>Rita-Barria</u>
8.	<u>Carolyn Franklin</u>	<u>132 Via Havarre</u>	<u>Carolyn Franklin</u>
9.	<u>Phil Summers</u>	<u>118 VIA DE LA REINA</u>	<u>Phil Summers</u>
10.	<u>Phil Summers</u>	<u>118 VIA DE LA REINA</u>	<u>Phil Summers</u>
11.	<u>Ralph D. Sumner</u>	<u>118 VIA DE LA REINA</u>	<u>Ralph D. Sumner</u>

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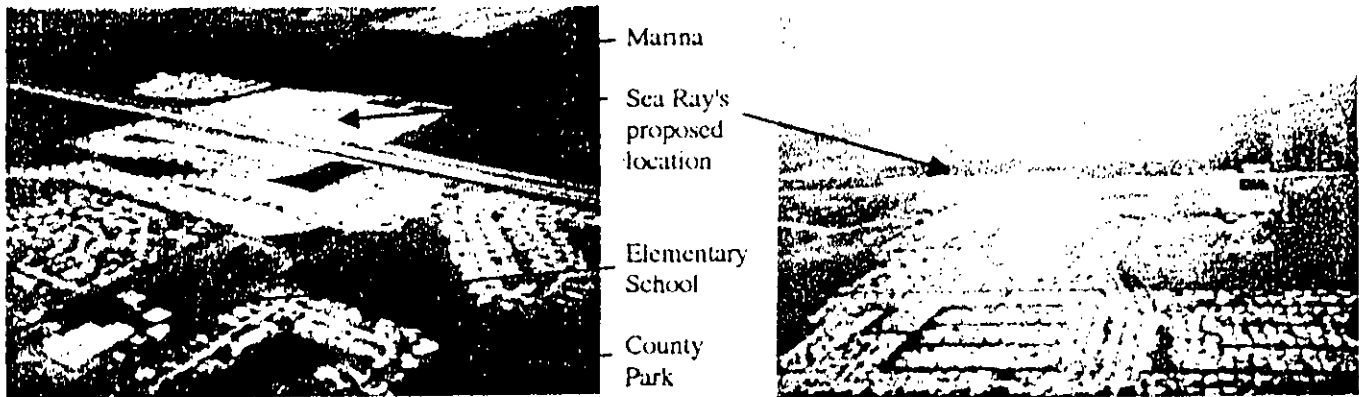
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	Name	Address	Signature
1.	<u>111 Fred Adams</u>	<u>103 Via De La Reina</u>	<u>Mildred Adams</u>
2.	<u>Sullivan Gardner</u>	<u>125 Las Palmas</u>	<u>Sullivan Gardner</u>
3.	<u>Paul J. Gardner</u>	<u>" " "</u>	<u>Paul Gardner</u>
4.	<u>Stella Fogarty</u>	<u>113 LAS PALMAS H.S.</u>	<u>Stella Fogarty</u>
5.	<u>Juan Fisher</u>	<u>119 Via De La Reina, M.I.</u>	<u>Juan Fisher</u>
6.	<u>FRANCIS E. FEHET</u>	<u>119 VIA DE LA REINA</u>	<u>F.E. Fehet</u>
7.	<u>IRIS KRANZ</u>	<u>210 CORDOBA CT. MI FL.</u>	<u>Iris Kranz</u>
8.	<u>William KRANZ</u>	<u>210 CORDOBA CT MI FL.</u>	<u>William Kranz</u>
9.	<u>Sophie Principi</u>	<u>605 Sunset Lane M.I. FL.</u>	<u>Sophie Principi</u>
10.	<u>RONALD TRULL</u>	<u>13 Via de La Reina MI FL.</u>	<u>Ronald Trull</u>

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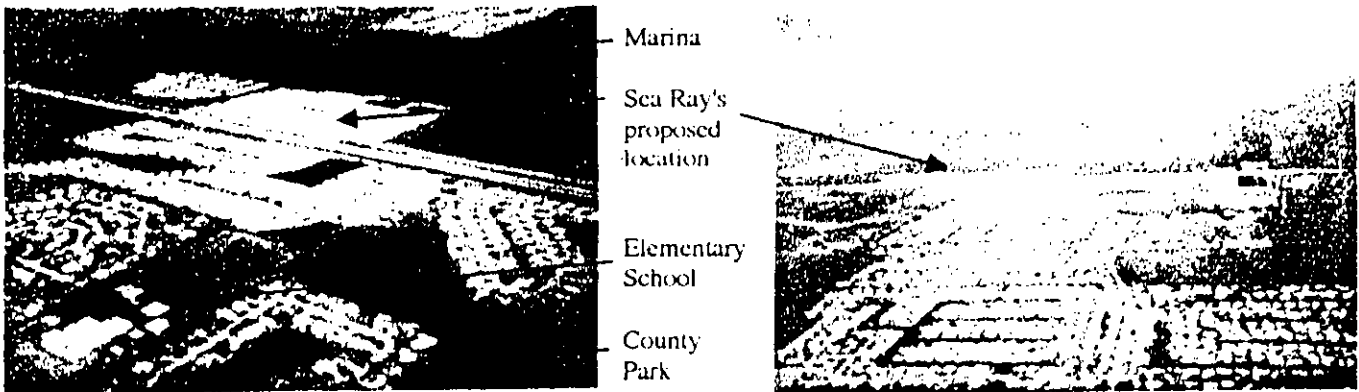
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Name	Address	Signature
1. CLARENCE W. WASH	109 VIA DELAWARE, MERRITT ISLAND, FL 32953	Clarence Wash
2. DOROTHY A WASH	109 VIA DELAWARE, MERRITT ISLAND, FL 32953	Dorothy Wash
3. JOHN R. WASH	2595 W. CONCORD AVE, MERRITT ISLAND, FL 32953	John Wash
4. ALTA GARDNER	3799 SIERRA DR., MERRITT ISLAND, FL 32953	Alta Gardner
5. FLORENCE SCOTT	1030 HERMOSA DR., MERRITT ISLAND, FL 32953	Florence Scott
6. ALEX M. JENKINS	1650 MARSH ST, MERRITT ISLAND, FL 32953	Alex M. Jenkins
7. MARVEL JENKINS	1560 SUTTON ST, MERRITT ISLAND, FL 32953	Marvel Jenkins
8. GEORGE T. JENKINS	1560 SUTTON ST, MERRITT ISLAND, FL 32953	George T. Jenkins
9. PEARL THOMAS	416 A LANE, COCOA, FL 32909	Pearl Thomas
10. E.V. STEPHENSON	1760 ST. ANDREW DR., SPARKLEDALE, FL 32953	E.V. Stephenson

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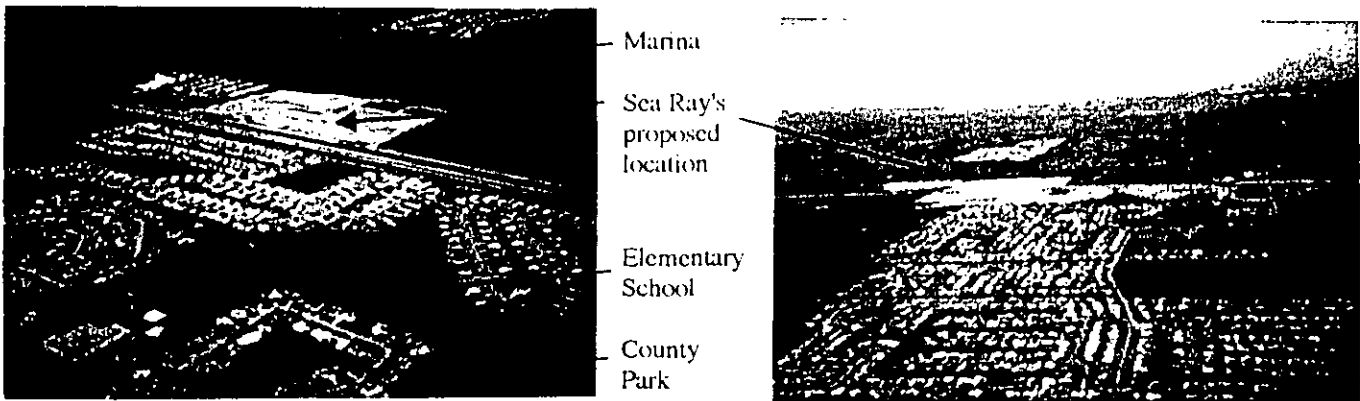
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1.	MARY-JANE PAGE	249 VIA HAVARRE, M.I.	Mary-Jane Page
2.	CHRISTINA M. PAGE	248 VIA HAVARRE, M.I.	Christina M. Page
3.	Chris Czaplinski	830 2 <sup>nd</sup> ST. M.I.	Chris Czaplinski
4.	Mark McGrew	128 E. LEON LA. Cocoa Beach	Mark McGrew
5.	Brian Ackerman	204 ROOSEVELT Apt 3 C.C.	Brian Ackerman
6.	J.C. Linker	16-25 N.T. TRAIL M.I.	J.C. Linker
7.	Dennis Donovan	104 W PASCAL LANE C.B.B.	Dennis Donovan
8.	Mary Beth Hunt	170 VIA HAVARRE M.I.	Mary Beth Hunt
9.	Susan S. Harris	8759 COCA COURT, C. GAITHERAL	Susan S. Harris
10.	William A Gerhart	164 Via Havarr - M.I.	William A Gerhart

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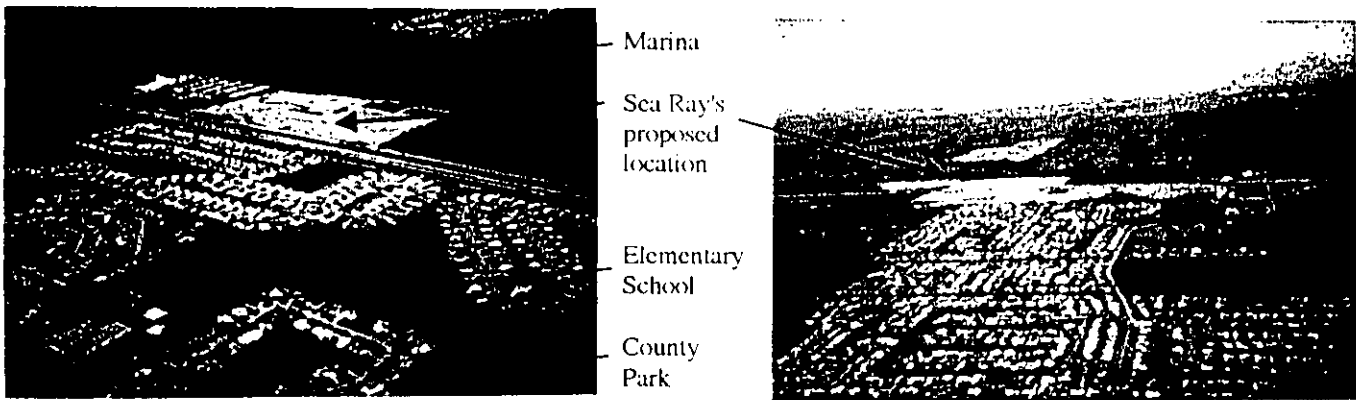
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1.	RAY H. BOWEN	244 VIA HAVARRE	R.H. Bowen
2.	RICHARD BARCOCK	4323 HORSESHOE BEND	Richard Barcock
3.	JOHN & BEA FRANKO	1785 DOGWOOD DR	Bea Franko John Franko
4.	HARRELL W. SMITH	1049 OLIVE ST.	Harrell W. Smith
5.	Joanne W. Smith	1049 OLIVE ST COCOA	Joanne W. Smith
6.	FRANK REGUIN	1670 DAVIS DR	Frank Reguin
7.	DAVID SPENCER	1535 SUNSHINE DR	David Spencer
8.	TERRY L. KENDSON	335 GLEN HAVEN DR	Terry L. Kendson
9.	STEPHANIE GIORGI	411 VIA SALERNO CT. M.I.	Stephanie Giorgi
10.	Debra Massimilla	1415 S Harbor Dr. M.I.	Debra Massimilla

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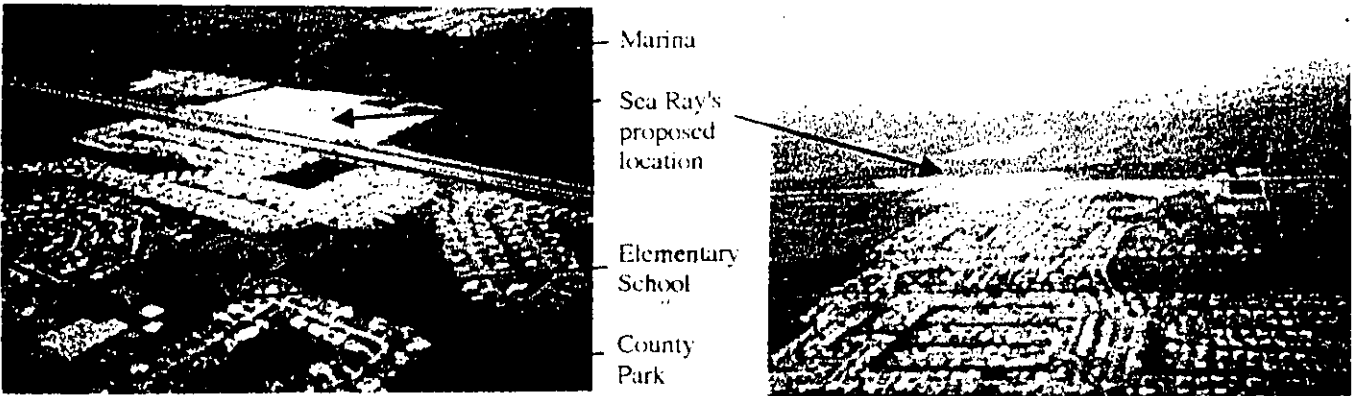
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1.	<u>HARRY PRICE</u>	<u>305 Palmetto Ave</u>	<u>[Signature]</u>
2.	<u>Vincent Massimilla</u>	<u>M. I.</u>	<u>[Signature]</u>
3.	<u>Bambi Wiedemann</u>	<u>3817 Stoughton Dr, Cocoa, FL 32926</u>	<u>[Signature]</u>
4.	<u>Mayellen Ahearn</u>	<u><del>890</del> 8902 Lantana Ct, Cape Canaveral</u>	<u>[Signature]</u>
5.	<u>Libby Crossley</u>	<u>1470 SYKES CREEK DR. M.I. 32953</u>	<u>[Signature]</u>
6.	<u>Audrey Brown</u>	<u>1647 Sunset Ave Cocoa 32906</u>	<u>[Signature]</u>
7.	<u>HULEN SIAFER</u>	<u>325 Bimini Rd Merritt Is FL 32952</u>	<u>[Signature]</u>
8.	<u>Donald Worthington</u>	<u>165 Brandy Lane Merritt Is FL 32952</u>	<u>[Signature]</u>
9.	<u>Sandy Hyard</u>	<u>4594 Wood Stock Dr Merritt Island 32953</u>	<u>[Signature]</u>
10.	<u>Bill Sant</u>	<u>490 Maraca Dr</u>	<u>[Signature]</u>

December 1999:

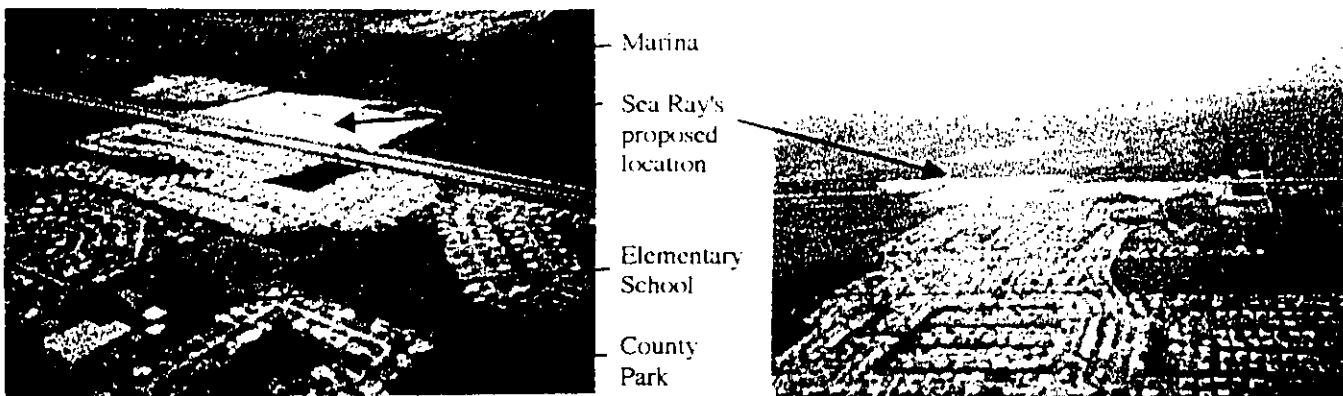
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We seriously consider the issuance of the Sea Ray Air Construction Permit a failure in <sup>the</sup> protection of the "comfortable use and enjoyment of life or property" [Sec. 11(b)].

Name	Address	Signature
1. Nancy Bowen	2411 Via Hawarre, M.I.	Nancy Bowen
2. Cheryl Hatten	10600 LORWIG DR MT	Cheryl Hatten
3. Robyn Onizuka	585 Panama Blvd MT	Robyn Onizuka
4. Jenny Thomas	40 Parole Dr. M.I.	Jenny Thomas
5. Alice Carter	1740 S. Merinae Mt	Alice Carter
6. Olga Morales	305 Norwood St. M.I.	Olga Morales
7. J N R Seed	245 VIA HAVARRE	J N R Seed
8. Lew Bowman	241 VIA HAVARRE	Lew Bowman
9. Heidi Bowman	241 VIA HAVARRE	Heidi Bowman
10. Barbara Williams	136 Pine Jay Lane Mt.	Barbara Williams



December 1999:

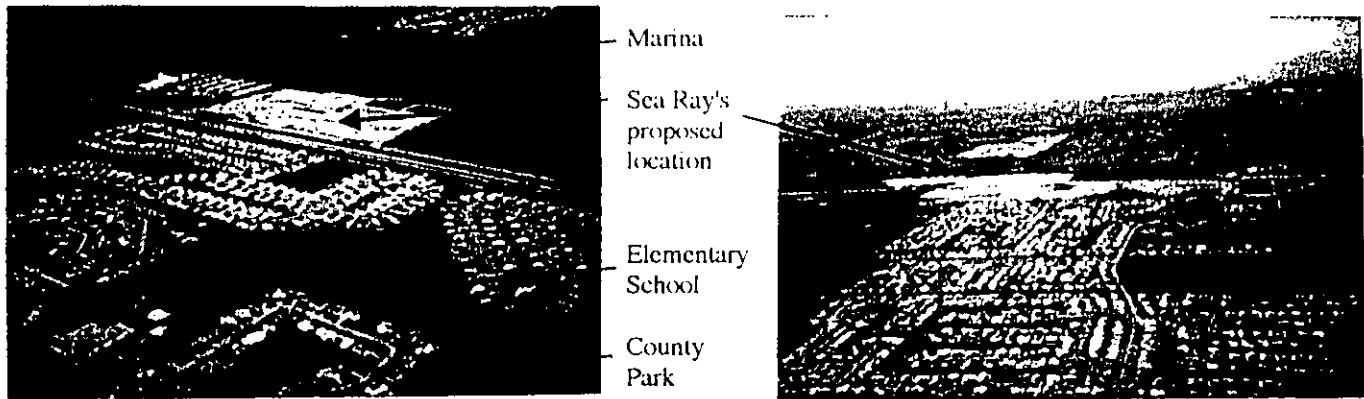
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	Name	Address	Signature
1.	CHARLES TAYLOR	2225 CAPEVIEW ST	
2.	Deanna Chirame	1500 Girard Blvd	
3.	JOSEPH GIARDANO	1430 GIRARD BLVD.	
4.	Virginia R. Giardano	1430 GIRARD BLVD	
5.	Mrs E. J. Johnson	2160 Queen Ann St	
6.	Linda Dick	2170 QUEEN ANN ST.	
7.	Joseph Perry	2385 Queen Ann St. MI.	
8.	Cheryl Perry	2385 Queen Ann St. MI	
9.	Heidi M. Milla	1285 Martin Blvd	
10.	Donna Brecker	1255 John's Cir.	

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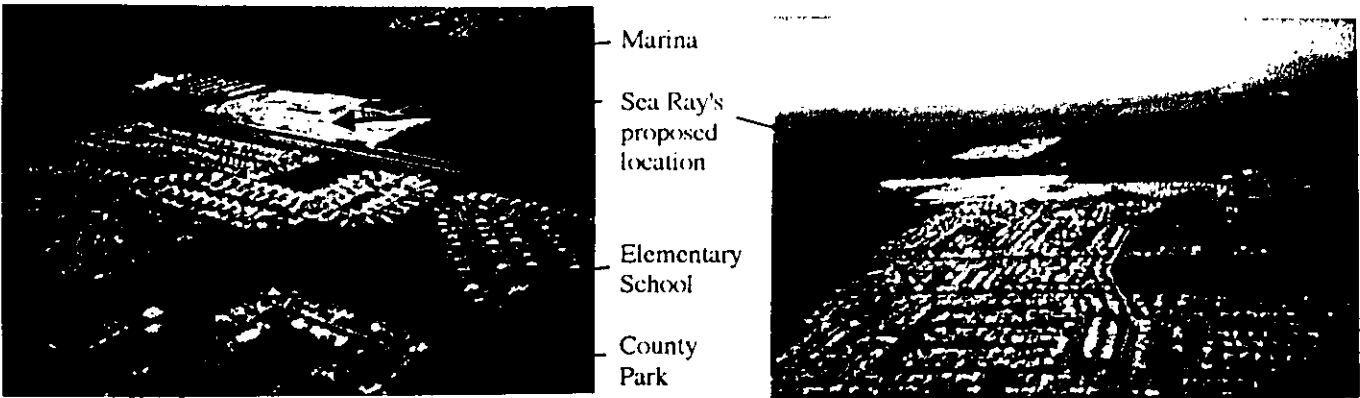
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	Name	Address	Signature
1.	SHAIL PARIKH	2155 DUMAS STREET	Shail Parikh
2.	Kathy Rube	2335 Bentley St	Kathy Rube
3.	Mauro Pennell	3139 Ipswich Dr	Mauro Pennell
4.	John Keil	1250 Arlington Cir	John Keil
5.	Yvonne Williams	1260 Wellington Circle	Yvonne Williams
6.	Thomas V. Stelling	1310 Arlington Ave.	Thomas V. Stelling
7.	LAZARO PIZZARO	1275 ARLINGTON CA.	Lazaro Pizarro
8.	Manuel Pizarro	1285 Wellington Ave. M.I.	Manuel Pizarro
9.	Paul Holz	1224 Potomac Dr MI	Paul Holz
10.	Anne Holz	1224 Potomac Dr, MI	Anne C Holz

December 1999:

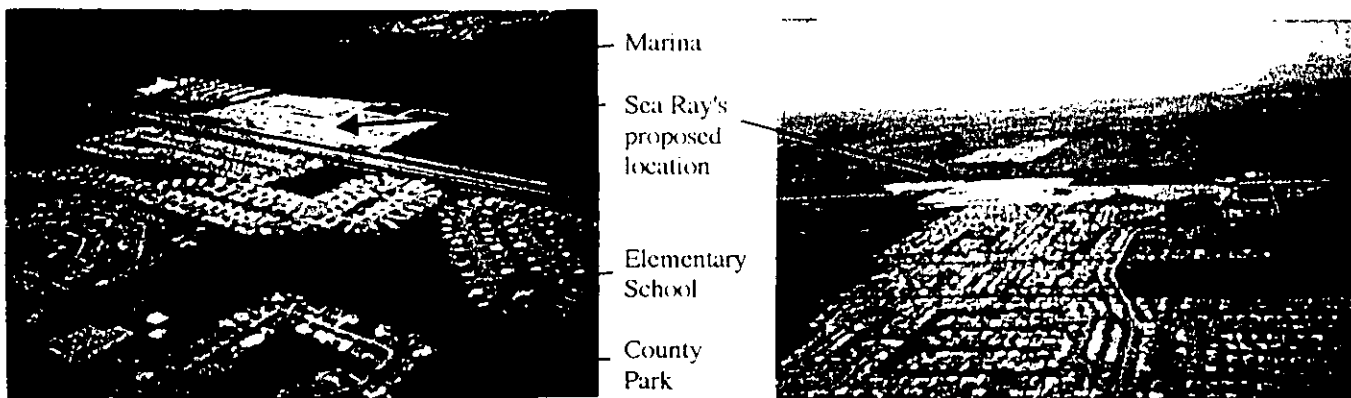
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	Name	Address	Signature
1.	<u>Douglas Hall</u>	<u>1177 Potomac Dr</u>	<u>[Signature]</u>
2.	<u>David A. Lee</u>	<u>1171 Potomac Dr</u>	<u>[Signature]</u>
3.	<u>Diana Brannon</u>	<u>1293 Potomac Dr</u>	<u>[Signature]</u>
4.	<u>ROXALIE GRAYSON</u>	<u>1293-Potomac Dr</u>	<u>[Signature]</u>
5.	<u>Don + Y. Gene Chas</u>	<u>1291 Potomac Dr.</u>	<u>[Signature]</u>
6.	<u>Wm. J. Knight</u>	<u>1287 Potomac Dr</u>	<u>[Signature]</u>
7.	<u>NORM BARNUM</u> <u>[Signature]</u>	<u>1285 POTOMAC DR.</u>	<u>[Signature]</u>
8.	<u>CAROL BARNUM</u>	<u>1285 POTOMAC DR</u>	<u>[Signature]</u>
9.	<u>Michelle Johnson</u>	<u>1283 Potomac Dr.</u>	<u>[Signature]</u>
10.	<u>Chris Johnson</u>	<u>1283 Potomac Dr.</u>	<u>[Signature]</u>

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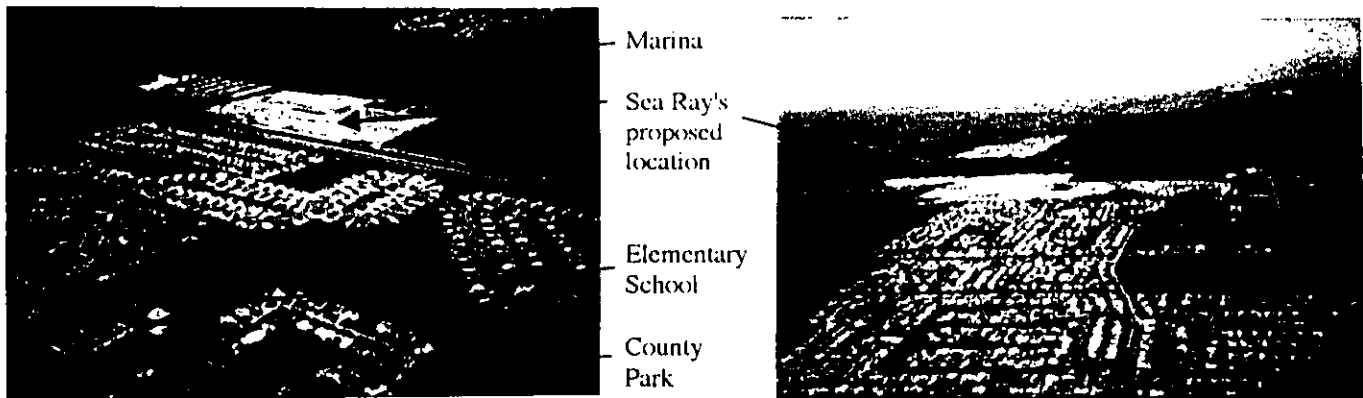
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	Name	Address	Signature
1.	<u>Ray Kent</u>	<u>1270 GRAND CAYMAN DR</u>	<u>Ray Kent</u>
2.	<u>Charles Kent</u>	<u>1270 Grand Cayman Dr</u>	<u>Charles Kent</u>
3.	<u>DAN HOATS</u>	<u>1178 POTOMAC DR</u>	<u>Dan Hoats</u>
4.	<u>Nick Madsen</u>	<u>1178 Potomac Dr</u>	<u>Nick Madsen</u>
5.	<u>Amey Paroline</u>	<u>1182 Potomac Dr.</u>	<u>Amey Paroline</u>
6.	<u>Addison Paroline</u>	<u>1182 Potomac Dr</u>	<u>Addison Paroline</u>
7.	<u>Todd Paroline</u>	<u>1182 Potomac Dr.</u>	<u>Todd Paroline</u>
8.	<u>R. J. Edwards</u>	<u>1188 Potomac Dr.</u>	<u>R J Edwards</u>
9.	<u>S.R. Edwards</u>	<u>1188 Potomac Dr.</u>	<u>S.R. Edwards</u>
10.	<u>G L Kenhart</u>	<u>1188 Potomac Dr.</u>	<u>G L Kenhart</u>

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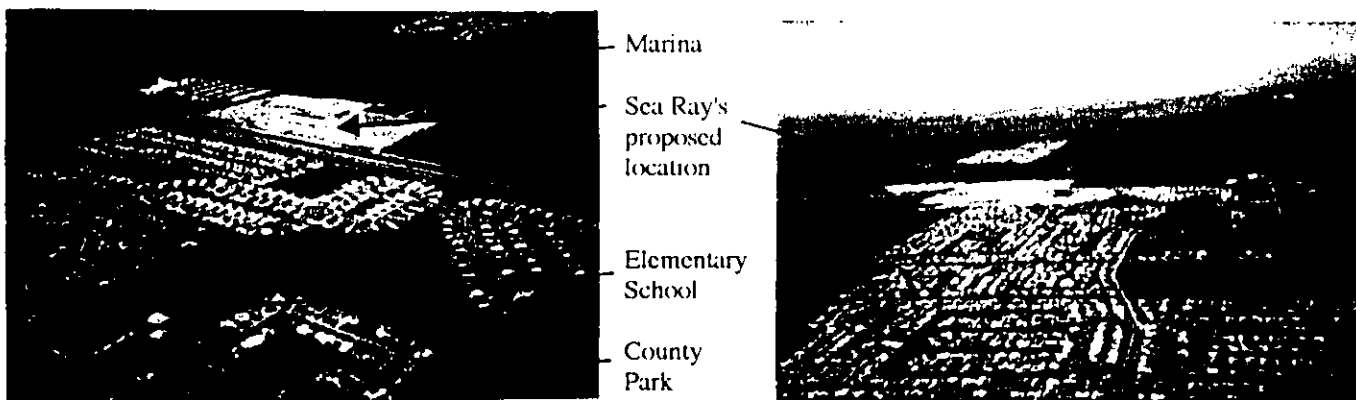
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	Name	Address	Signature
1.	<u>Erkki Nisula</u>	<u>1200 Potomac Dr.</u>	<u>[Signature]</u>
2.	<u>Christine Nisula</u>	<u>1200 Potomac Dr.</u>	<u>C Nisula</u>
3.	<u>MARIE EVANS</u>	<u>1202 POTOMAC DR</u>	<u>[Signature]</u>
4.	<u>BRIAN EVANS</u>	<u>1202 POTOMAC DR</u>	<u>[Signature]</u>
5.	<u>PAUL WHITBY</u>	<u>1261 POTOMAC DR</u>	<u>Paul Whitby</u>
6.	<u>Richard Wolke</u>	<u>1600 Sandpiper St.</u>	<u>[Signature]</u>
7.	<u>[Signature]</u>	<u>1600 Sandpiper St.</u>	<u>[Signature]</u>
8.	<u>Missy L. Ball</u>	<u>1184 POTOMAC DR</u>	<u>Missy L. Ball</u>
9.	<u>[Signature]</u>	<u>1183 POTOMAC DR</u>	<u>[Signature]</u>
10.	<u>DAVID ALBERTA</u>	<u>1179 POTOMAC DR</u>	<u>David Alberta</u>

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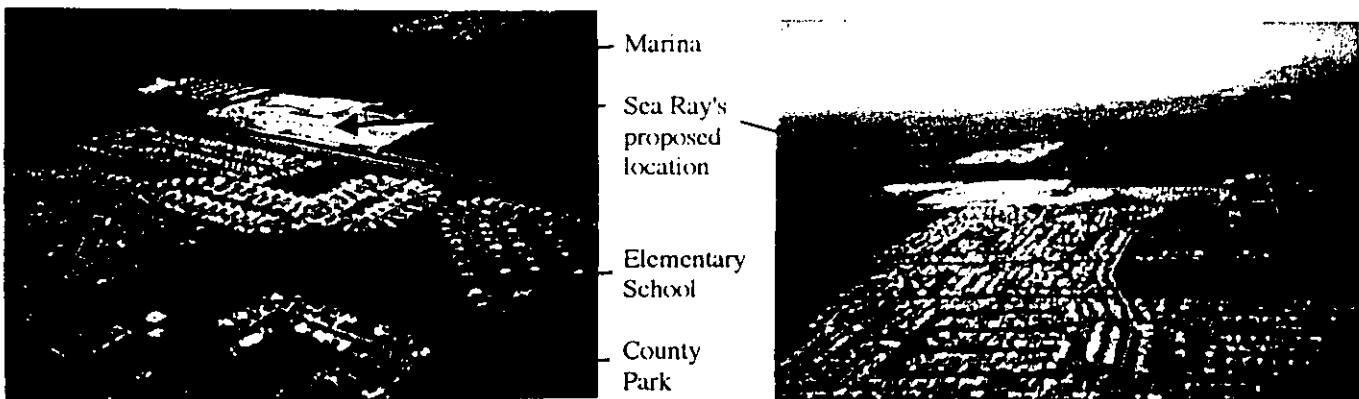
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Name	Address	Signature
1. DAMIAN LUDWICZAK	1356 SANIBEL LN, MI FL 32952	Damian Ludwiczak
2. Charles & Leigh Curley	1358 Sanibel Ln. MI FL 32952	Leigh Curley
3. Rossana Garces	1360 Sanibel Ln. MI FL 32952	Rossana Garces
4. Rudy Esquivel	1362 Sanibel Ln MI FL 32952	Rudy Esquivel
5. Kathy M Beate	1366 SANIBEL LN MI FL 32952	Kathy M Beate
6. ARVIND C. PATEL	1411 GRAND CAYMAN MT.	Arvind Patel
7. LYNN GRANT	1401 GRAND CAYMAN DR FL 32952	Lynn T. Grant
8. DAVID GRANT	1401 GRAND CAYMAN DR FL 32952	David Grant
9. WILLIAM MANLEY	1381 GRAND CAYMAN DR MI FL 32952	William C. Manley
10. JAY W. ROBERTS	1371 GRAND CAYMAN DR. MI 32952	Jay W. Roberts

December 1999:

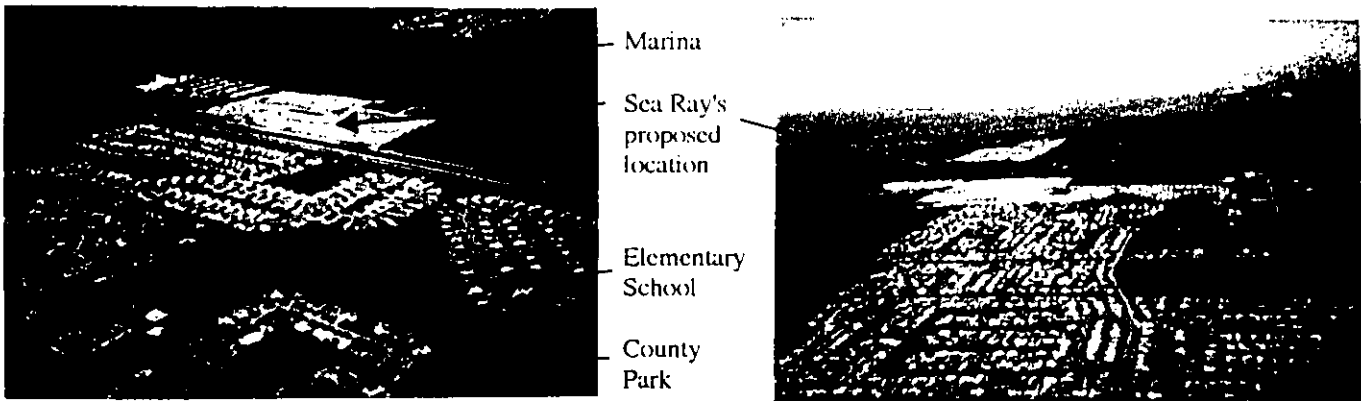
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	Name	Address	Signature
1.	<u>Timothy W. Widrick</u>	<u>1230 Grand Cayman Dr. Merritt Island, FL</u>	<u>Timothy W. Widrick</u>
2.	<u>Darrell Gordon</u>	<u>1379 Sanibel Lane Merritt Island FL</u>	<u>Darrell Gordon</u>
3.	<u>Melissa Gordon</u>	<u>1379 Sanibel Lane Merritt Island FL</u>	<u>Melissa Gordon</u>
4.	<u>ROBERT DRAGONE</u>	<u>1377 SANIBEL LN MERRITT ISLAND</u>	<u>Robert Dragon</u>
5.	<u>Robini DRAGONE</u>	<u>1377 SANIBEL LN MERRITT IS.</u>	<u>Robini Dragone</u>
6.	<u>George V. Selena</u>	<u>1375 SANIBEL LN. MERRITT IS.</u>	<u>George V. Selena</u>
7.	<u>Scott Theobald</u>	<u>1470 Grand Cayman Dr. Merritt Island</u>	<u>Scott Theobald</u>
8.	<u>Norma Schaut</u>	<u>1490 Grand Cayman Dr Merritt Island</u>	<u>Norma Schaut</u>
9.	<u>Evelio Hernandez</u>	<u>1295 SANIBEL LN.</u>	<u>Evelio Hernandez</u>
10.	<u>Brian Dixon</u>	<u>1383 SANIBEL LN.</u>	<u>Brian Dixon</u>

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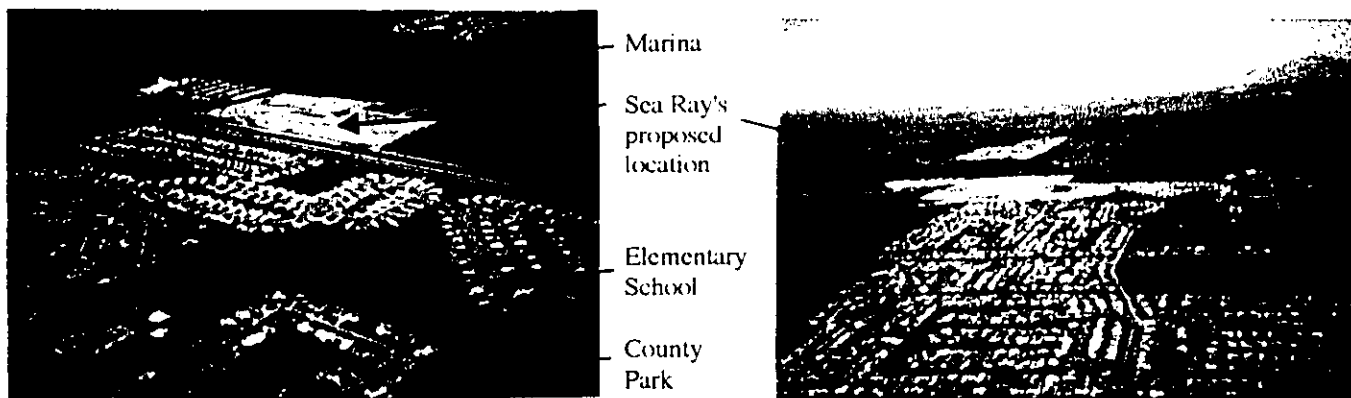
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Name	Address	Signature
1. Kathleen B. Gordon	1381 Sanibel Lane, Merritt Island, FL 32952	Kathleen B. Gordon
2. Julie Sammis	1386 " " " " 32952	Julie Sammis
3. Greg Sanders	1390 Sanibel Ln MI 32952	Greg Sanders
4. RICHARD CROGT	1398 SANIBEL LN MI. 32952	Richard Crogt
5. _____	Sanibel Ln MI 32952	_____
6. ANIL K. PATEL	1491 GRAND CAYMAN DR	Anil K. Patel
7. RITA A. PATEL	1491 GRAND CAYMAN DR	Rita A. Patel
8. ALEXIS R. ALICCA	1471 GRAND CAYMAN DR MI 32952	Alexis R. Alicca
9. BRENDA S. FUENTES	1471 GRAND CAYMAN DR. MI 32952	Brenda S. Fuentes
10. Daniel E. McLinn	1431 Grand Cayman Dr MI 32952	Daniel E. McLinn
11. Patricia L. McLinn	1431 Grand Cayman Dr MI 32952	Patricia L. McLinn



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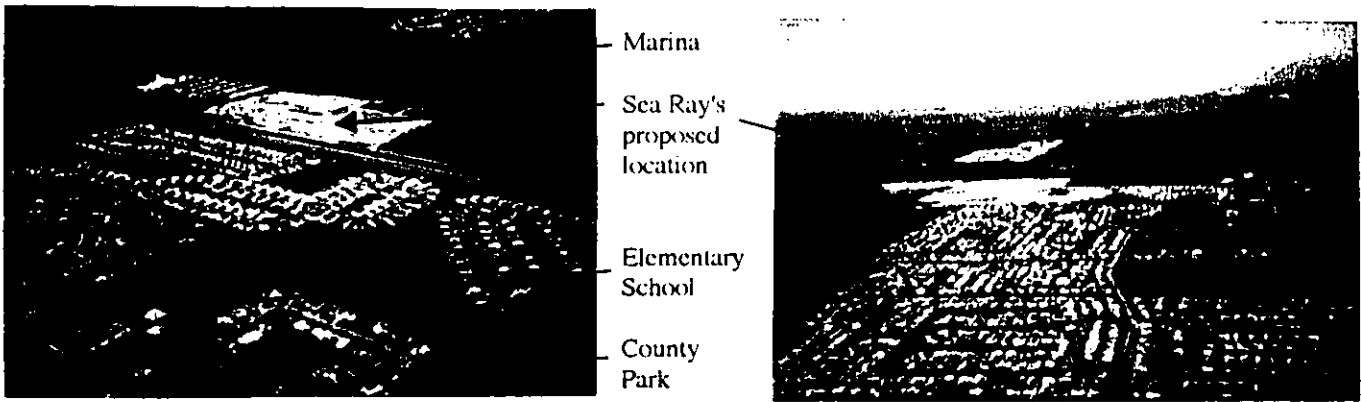
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	Name	Address	Signature
1.	April Peters	2175 Topaz Ct. M.I., FL 32953	April Peters
2.	TRILBY BRANNON	205 S. COURTNEY CRY #105 MI	Trilby Brannon
3.	Theresa Confield	1355 Phillips Dr Merritt Island 32953	Theresa Confield
4.	Peggy Peters	3791 Seaside Merritt Is 32953	Peggy Peters
5.	Melody Wilson	405 Captain Blyth	Melody Wilson
6.	Jamarcus Bennett	115 Moore ave. Merritt Is.	Jamarcus Bennett
7.	LARRY LONGEST	3781 SUNWARD Dr. M.I.	Larry Longest
8.	Rubin Bernal	1545 Venus St MI	Rubin Bernal
9.	Paula McCormack	110D Pacific Pl. MI 32953	Paula McCormack
10.	Barbara Kennedy	1335 Chase Hammock Rd, M.I. 32953	Barbara Kennedy

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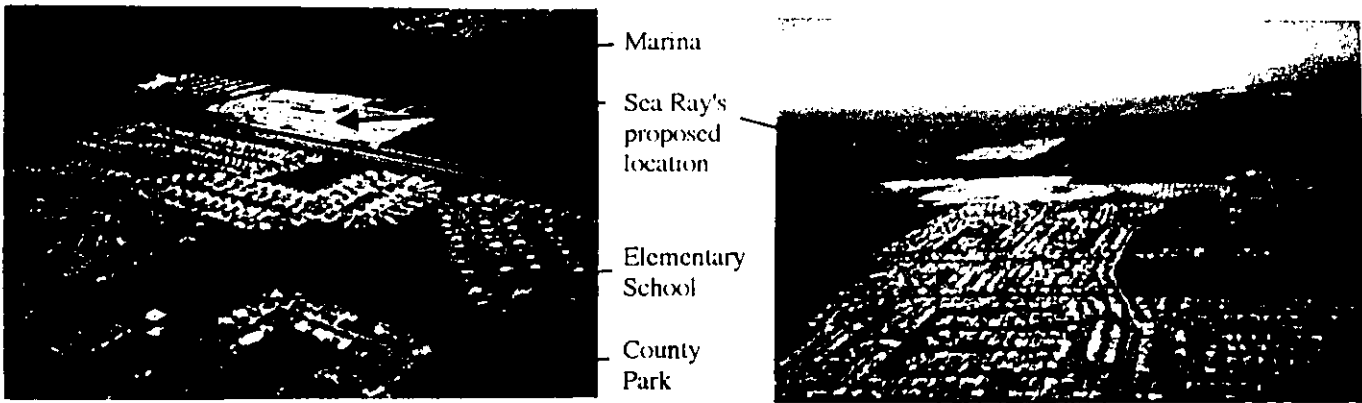
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	Name	Address	Signature
1.	<u>Peter Karadis</u>	<u>1345 Sanibel Lane</u>	<u>P. Karadis</u>
2.	<u>Nancy Karadis</u>	<u>1345 Sanibel Lane</u>	<u>N. Karadis</u>
3.	<u>Ben N. Ward Jr.</u>	<u>1347 Sanibel Lane</u>	<u>Ben N. Ward Jr.</u>
4.	<u>Nancy A. Ward</u>	<u>1347 Sanibel Lane</u>	<u>Nancy A. Ward</u>
5.	<u>Janet Meyer</u>	<u>1353 Sanibel Lane</u>	<u>Janet Meyer</u>
6.	<u>Tom Tokmerke</u>	<u>1354 Sanibel Lane</u>	<u>Thomas Tokmerke</u>
7.	<u>Ben Ward</u>	<u>1359 Sanibel Lane</u>	<u>Ben Ward</u>
8.	<u>Robin Ward</u>	<u>1359 Sanibel Lane</u>	<u>Robin Ward</u>
9.	<u>Chris Heckman</u>	<u>1361 Sanibel Lane</u>	<u>Chris Heckman</u>
10.	<u>LIKE A. PETERSON</u>	<u>1363 SANIBEL LANE</u>	<u>Like Peterson</u>

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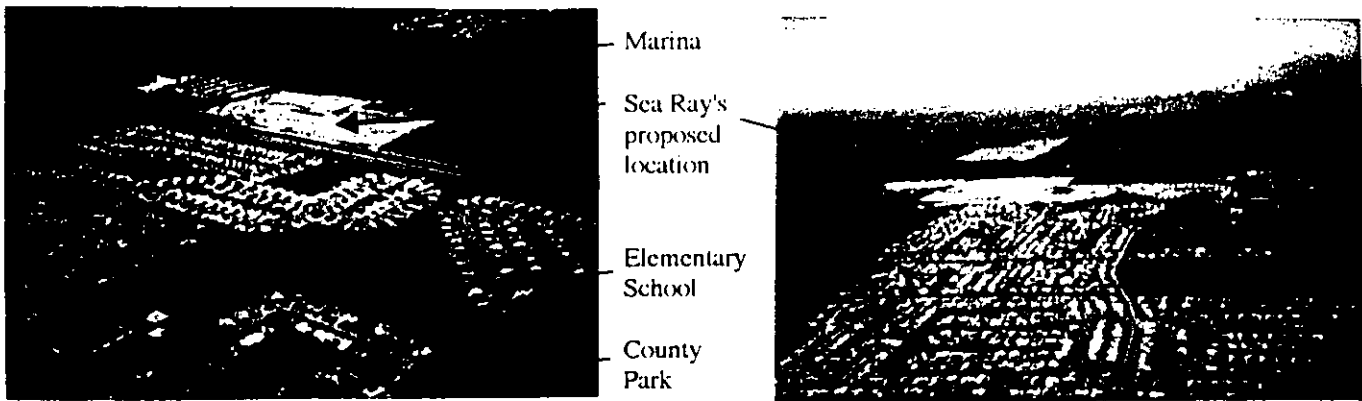
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1. <u>STEVEN W. CLARKE</u>	<u>1421 GRAND CAYMAN DRIVE</u>	<u>Steven W. Clarke</u>
2. <u><del>STEVEN W. CLARKE</del></u>	<u><del>1421 GRAND CAYMAN DRIVE</del></u>	<u><del>Steven W. Clarke</del></u>
3. <u>BRIAN BEAVER</u>	<u>1348 SAMUEL LANE MERRITT ISLAND FL</u>	<u>Brian Beaver</u>
4. <u>Phyllis Stiver</u>	<u>1357 Samuel Lane Merritt Is., FL 32952</u>	<u>Phyllis Stiver</u>
5. <u>Russ Brown</u>	<u>1365 SAMUEL LANE MERRITT ISLAND, FL</u>	<u>Russ Brown</u>
6. <u>Missie Brown</u>	<u>1365 Samuel Ln. MI FL 32952</u>	<u>Missie Brown</u>
7. <u>RICHARD SIMONSON</u>	<u>1367 SAMUEL LANE, MI 32952</u>	<u>Richard Simonson</u>
8. <u>Lora Kindred</u>	<u>1400 Grand Cayman Dr, MI 32952</u>	<u>Lora Kindred</u>
9. <u>STEVE MARE</u>	<u>1380 GRAND CAYMAN DR. MI 32952</u>	<u>Steve Mare</u>
10. <u>MARTA BEAVER</u>	<u>1348 SAMUEL LN, MI FL 32952</u>	<u>Marta Beaver</u>

December 1999:

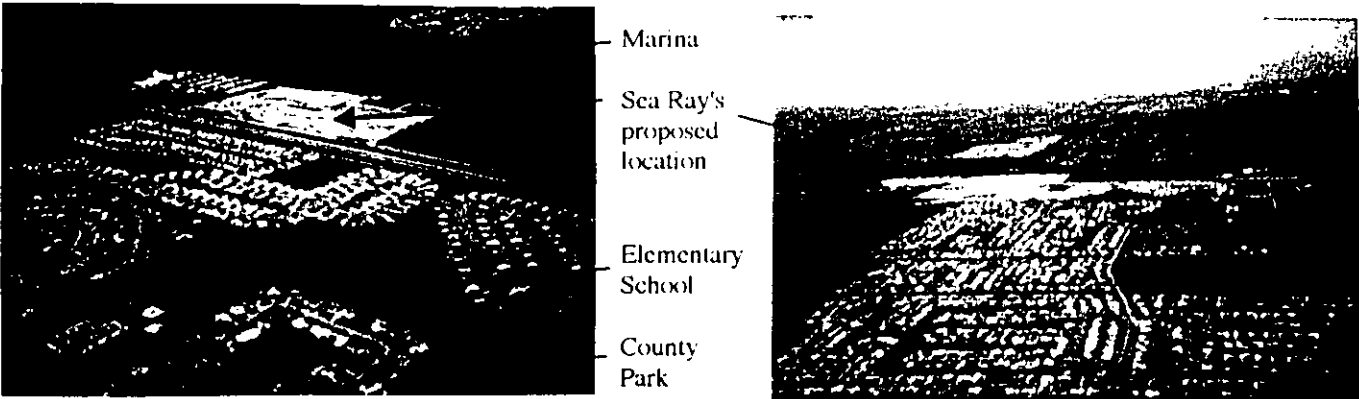
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- Zoning exemptions were required for Sea Ray to even propose the new Merritt Island facility.
- Sea Ray's proposed facility, near existing homes, parks, and schools, is a ludicrous location for a major (Title V) source of hazardous air pollutants.



We seriously consider the issuance of the Sea Ray Air Construction Permit a failure in protection of the "comfortable use and enjoyment of life or property" [Sec. 11(b)].

Name	Address	Signature
1. Dorothy Nevers	1220 Grand Cayman Dr.	Dorothy Nevers
2. Jani Auer	1210 Grand Cayman Dr.	Jani Auer
3. Amy L. Hume	1211 Grand Cayman Dr.	Amy L. Hume
4. HAROLD WILLIAMS	1260 GRAND CAYMAN DR.	Harold Williams
5. PETER S. JAMES	1200 GRAND CAYMAN DR.	Peter S. James
6. [Signature]	1200 Grand Cayman Dr.	[Signature]
7. JOANN MONAI	206 BEACH PARK LN	Joann Monai
8. GARY J. MONAI	206 BEACH PARK LANE	Gary J. Monai
9. ISAM YUNIS	1160 GRAND CAYMAN DR., NE, FL 32952	Isam Yunis
10. _____	_____	_____

December 1999:

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Marina  
 Sea Ray's proposed location  
 Elementary School  
 County Park



We seriously consider the issuance of the Sea Ray Air Construction Permit a failure in protection of the "comfortable use and enjoyment of life or property" [Sec. 11(b)].

	Name	Address	Signature
1.	<i>John Collins</i>	<i>340 Surf Spray Dr</i>	<i>John Collins</i>
2.	<i>K. M. M. M.</i>	<i>3570 N. Tropical Tr.</i>	<i>K. M. M. M.</i>
3.	<i>Karen Collins</i>	<i>340 Surf Spray Dr.</i>	<i>K. Collins</i>
4.	<i>Mike Meneira</i>	<i>435 Carrivena Ct.</i>	<i>M. Meneira</i>
5.	<i>Theresa Miles</i>	<i>1498 Stafford Ave.</i>	<i>T. Miles</i>
6.	<i>John Meneira</i>	<i>435 Carrivena Ct.</i>	<i>J. Meneira</i>
7.	<i>William Miles</i>	<i>1498 Stafford Ave</i>	<i>W. Miles</i>
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____

December 1999:

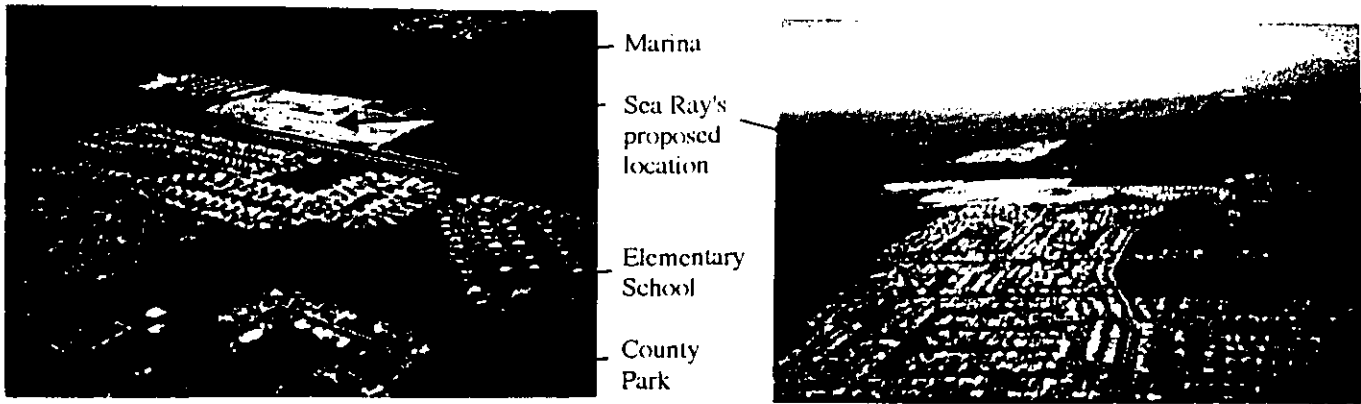
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	Name	Address	Signature
1.	<u>Sue Mathison</u>	<u>1597 Stafford Ave M.I.</u>	<u>S Mathison</u>
2.	<u>Julian E. Mathison</u>	<u>1597 Stafford Ave Merritt Is.</u>	<u>Julian Mathison</u>
3.	<u>John Nagle</u>	<u>1591 Stafford Ave, Merritt Is</u>	<u>J Nagle</u>
4.	<u>Beth Quapler</u>	<u>1589 Stafford Ave, Merritt Is</u>	<u>Beth Quapler</u>
5.	<u>Joyce Cole</u>	<u>1563 STAFFORD AVE, M.I.</u>	<u>Joyce Cole</u>
6.	<u>Edward Grimes</u>	<u>1549 STAFFORD AV. M.I.</u>	<u>E. Grimes</u>
7.	<u>Deanna Williams</u>	<u>1543 Stafford Ave, M.I.</u>	<u>Deanna Williams</u>
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____

December 1999:

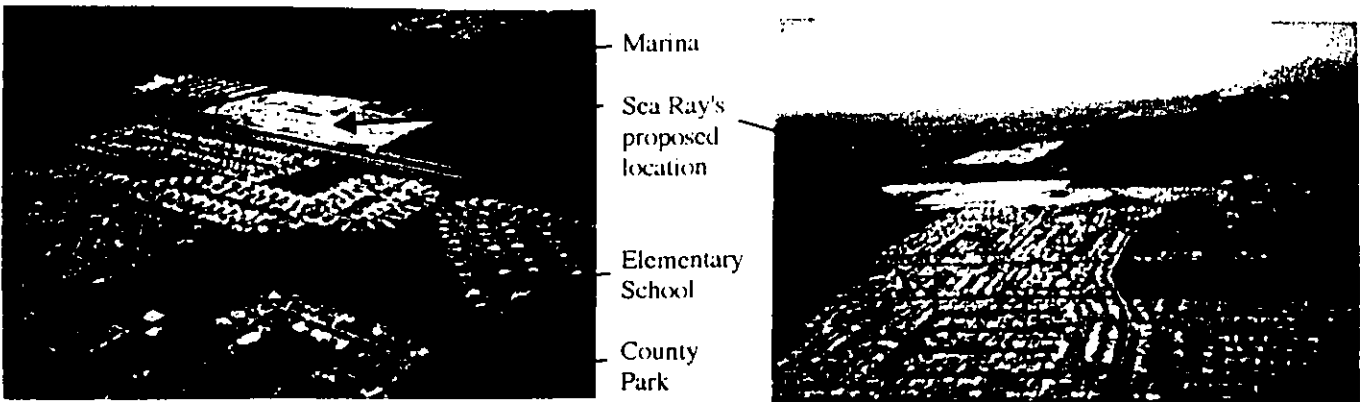
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We seriously consider the issuance of the Sea Ray Air Construction Permit a failure in protection of the "comfortable use and enjoyment of life or property" [Sec. 11(b)].

	Name	Address	Signature
1.	Mary Peterson	1363 Sanibel Lane	Mary Peterson
2.	Rich Symington	1367 Sanibel Lane	[Signature]
3.	Paulie Nesbit	1369 SANIBEL LANE	[Signature]
4.	Stephan Collins	1370 Grand Cayman Dr.	[Signature]
5.	DeAnna Guver	1376 Grand Cayman Dr.	[Signature]
6.			
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9.			
10.			

December 1999:

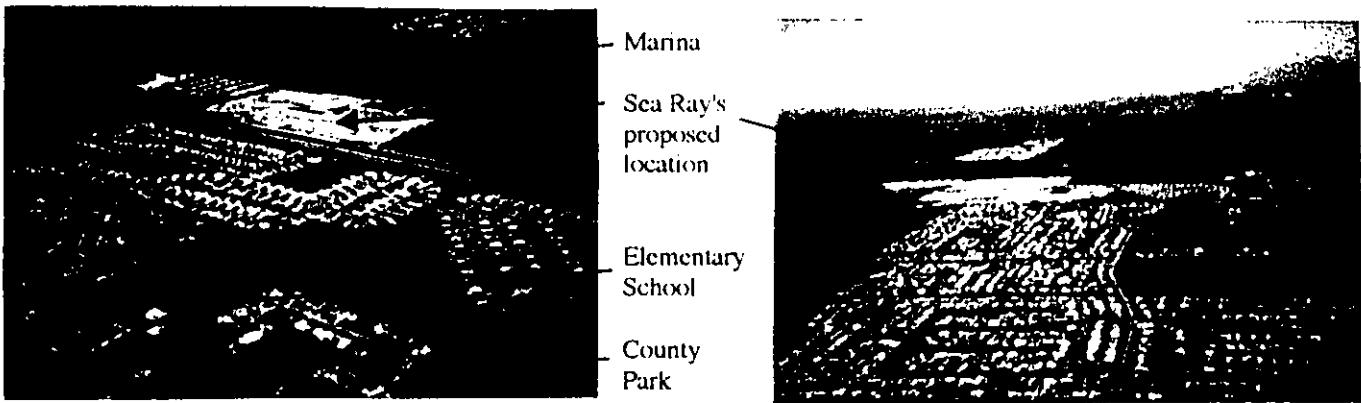
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	Name	Address	Signature
1.	Pat DeMark	1351 Grand Cypress Dr	Pat DeMark
2.	Missy Light Missy Light	1344 Sanibel Lane	Missy Light
3.	Vernon Wikander	1350 Sanibel Lane	Vernon Wikander
4.	Demetri Wikander	1350 Sanibel Lane	Demetri Wikander
5.	Michael MARGESCHKE	1352 SANIBEL LANE	Michael
6.	Jodie Ludwiczak	1356 Sanibel Ln.	Jodie Ludwiczak
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December 1999:

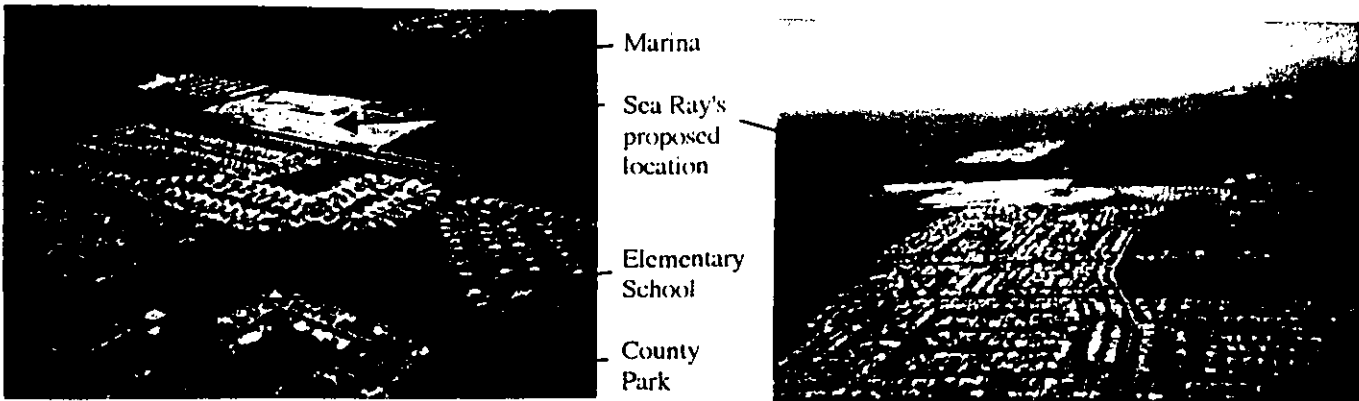
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	Name	Address	Signature
1.	<u>ELEN DIXON</u>	<u>383 SANIBEL Csw Merritt Island, FL</u>	<u>Elen Dixon</u>
2.	<u>Randall Gordon</u>	<u>1381 Sanibel Merritt Island, FL</u>	<u>Randall Gordon</u>
3.	<u>Deanne Widrick</u>	<u>1230 Grand Commerce</u>	<u>Deanne Widrick</u>
4.	<u>Rochael Lewis</u>	<u>1111 Grand Commerce Merritt Island, FL 32952</u>	<u>Rochael Lewis</u>
5.	_____	_____	_____
6.	_____	_____	_____
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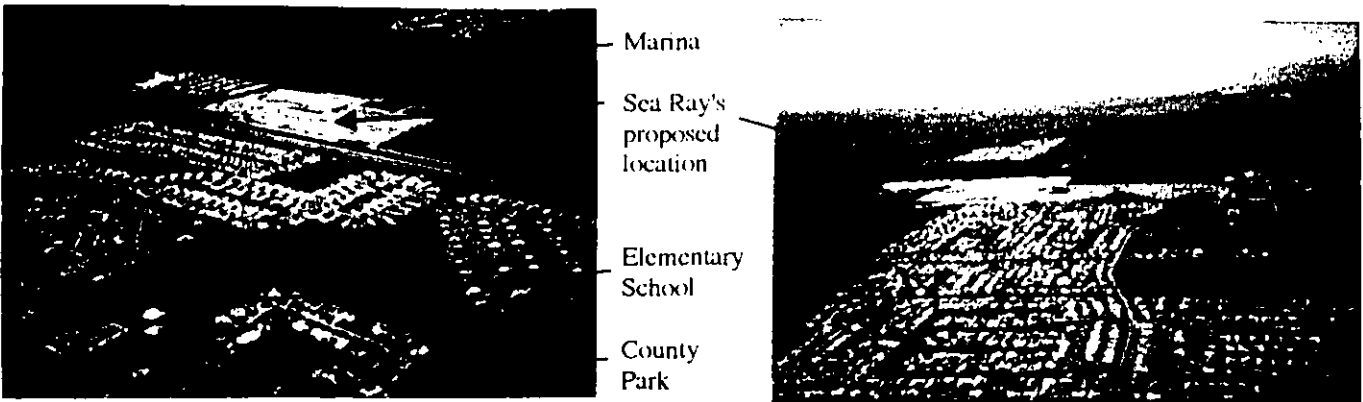
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	Name	Address	Signature
1.	<u>JAMES Zucchelli</u>	<u>1242 Potomac dr, Merritt Island FL 32952</u>	<u>[Signature]</u>
2.	<u>Yvonne Zucchelli</u>	<u>1242 Potomac Dr. MI, FL 32952</u>	<u>[Signature]</u>
3.	<u>Juliet Zucchelli</u>	<u>5737 Gatlin Ave #426 Orlando, FL 32832</u>	<u>[Signature]</u>
4.	<u>Alex Montecata</u>	<u>1234 Potomac Dr, MI FL 32952</u>	<u>[Signature]</u>
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
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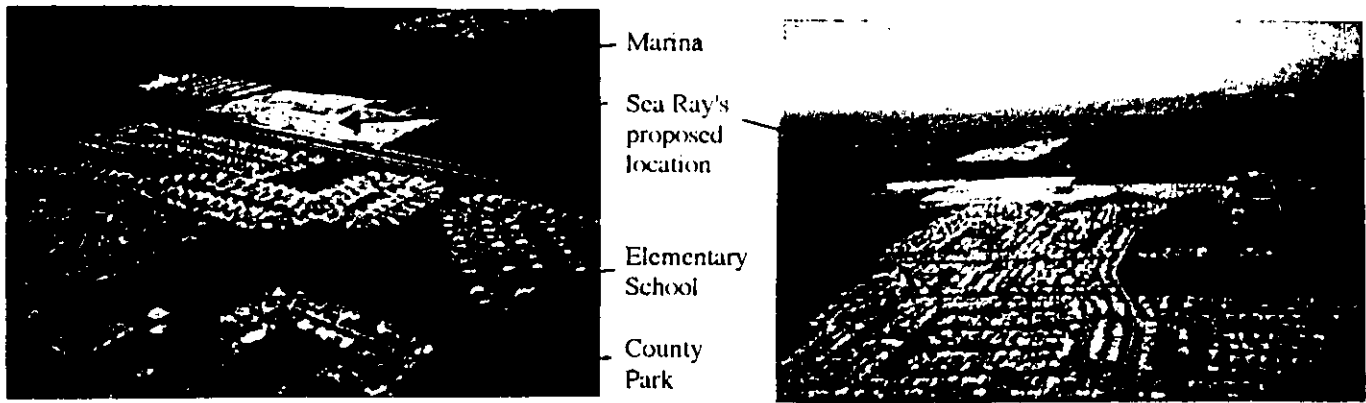
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	Name	Address	Signature
1.	ANTOINETTE C. PRISCO	2545 CASTILE CT MERRITT IS	Antoinette C. Prisco
2.	Tina Wireman	250 LeBlond Drive, MI	Tina Wireman
3.	Gregory Hodge	735 HANNAH DR. MI	Gregory Hodge
4.	Donald Sullivan Jr	2545 Castile Ct M.I.	Donald Sullivan Jr
5.	STEPHANIE PRISCO	1810 HORSLEY DR. ROCK	Stephanie Prisco
6.			
7.			
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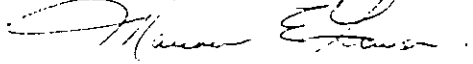
NAME

ADDRESS

SIGNATURE

Andy Latherson  
Donald Shupert  
Laureen Shawson

1277 Potomac Drive MI.  
1261 Grand Cayman Dr  
1261 Grand Cayman DR.

LOCAL NEWS INSIDE

Police capture bank robbery suspect who wanted money to buy Christmas gifts, 3B.

STATE NEWS INSIDE

Board agrees on how to implement Gov. Bush's new proposal on college admissions, 8B.

LOCAL

SATURDAY, December 11, 1999

SECTION B

Shelley Acoca, metro editor, 242-3631, 9 a.m.-6 p.m.

LOCAL BRIEFS

Dogs help kids



Sea Ray ordered to stop construction

DEP finds company installed water, electrical lines without permit

By Jeff Schweers  
FLORIDA TODAY

MERRITT ISLAND — The state Department of Environmental Protection has cited Sea Ray Boats for building its new boat-manufacturing plant without environmental construction permits.

Responding to a citizen's complaint, DEP inspectors discovered this week that the company was installing underground water and electrical lines to

service a building where harmful chemicals will be used during boat production.

The agency issued a letter warning Sea Ray that it was building without a permit and to stop construction not related to an existing warehouse on the site of the new plant.

"They can complete what's in the warehouse, but not the underground structures," Len Kozlov of the DEP's enforcement division said. They were told not to do that.

After receiving the letter, Sea Ray lawyers contacted the office and set up a meeting to discuss what it can and can't build before the company receives its permit.

"They asked to do more work around the existing warehouse, remove rubble and put up a fence," Kozlov said. "I said finish what's going on inside and don't do any more than that."

A meeting will be arranged during the next few weeks with DEP officials and Sea Ray's law-

yers, he said.

Sea Ray officials could not be reached for comment.

Sea Ray is seeking permission to build a \$16 million boat manufacturing plant on Merritt Island, about a mile east of its existing production facility between Sykes Creek and the Banana River.

They began construction of the warehouse and office space on the new site without DEP's knowledge or permission, Kozlov said.

When DEP found out, they said the company can finish the warehouse but cannot begin any construction on facilities that would emit styrene or other harmful chemicals before obtaining a state permit.

Styrene is a suspected carcinogen that causes brain damage.

The DEP is demanding that Sea Ray install equipment to reduce styrene emissions by 53 percent. Sea Ray officials have said that such equipment isn't needed.

## Objectionable Odor Report

**Time:** 3:00 - 3:30 p.m.

**Date:** November 17 (prepared November 20, 1999)

**City:** Merritt Island, Brevard County

**Location:** Sea Ray Drive between Highway 3 and Sykes Creek

**Wind:** Approximately from the East and clearly greater than 10 miles per hour

**Ambient Conditions:** 70-80 degrees, partly cloudy

**Observer:** A A. Linero, P.E. Administrator, New Source Review Section, Bureau of Air Regulation.

**Other details:** I entered Sea Ray Drive (parallel to SR 528) from Highway 3. Passengers (Russ Wider and Cindy Phillips) immediately commented on an odor. We proceeded along Sea Ray Drive on the short stretch where it lies along a West Northwest and East Southeast axis. I detected what I term as an objectionable odor and simultaneously experienced an irritating effect on my throat. It was detected immediately South of the Merritt Island Plant and West of the Product Engineering and Development Plant and the Sykes Creek Plant. The odor was the same as I encountered inside of Sea Ray's Sykes Creek Lamination Building in September. However, this time I experienced it off of Sea Ray's property on a public road.

Shortly after first experiencing the odor, I turned off the fan and closed the vents inside the car in response to the reaction of Russ Wider who was recovering from a cold. We continued East on Sea Ray Drive to the site of the Cape Canaveral Project. We observed that the Fabrication Building and Administrative Annex have been erected based on an external observation.

We turned back and stopped at Harbortown (upwind of the Sykes Creek Plant and downwind of the Cape Canaveral Project Site). We got out and did not detect any odors. From our vantage point, we observed the placement of construction equipment behind the Fabrication Building.

We got back into the car and proceeded (with windows closed and fan off) towards Highway 3. We promptly left the area to avoid exposing ourselves (particularly Russ) to the unpleasant agent.

**Conclusion:** Based on the observations above, Sea Ray was the source of the objectionable odor and irritant.

**Recommendation:** Follow up by conducting a survey downwind of Sea Ray based on weather predictions. Concentrate if possible on a day(s) when winds blow into a nearby neighborhood. A number of people have commented on odors near Sea Ray that are consistent with my observations. I sent Len Kozlov the comments I received by E-Mail.

**Other** After the November 17 Public Meeting, I mentioned the incident to Kevin Thompson, Director of Environmental Affairs at Sea Ray. I urged him to consider control equipment for the new project. He made no comments. I also informed one of Sea Ray's consultants, Mr. Kosky of Golder Associates, of the incident and my suggestion for the new project.





Florida  
Department of  
Environmental Protection

RECEIVED

DEC 10 1999

BUREAU OF AIR REGULATION

Jeb Bush  
Governor

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David Struhs  
Secretary

F A X T R A N S M I T T A L S H E E T

DATE: 12/10

TO: Eddie Depuy - Governor's Office

PHONE: \_\_\_\_\_

FAX: 7-0801

FROM: Pat Kennedy

PHONE: 8-0114

**Division of Air Resources Management**

FAX: **850.922.6979**

RE: Sea Ray Boats

CC: \_\_\_\_\_

Total number of pages including cover sheet: 2

**Message**

Eddie - Per your request to Jack Pons, here is a generic response for the Governor's signature for all the letters you are receiving about Sea Ray Boats. If you need anything else, please let me know. Thanks.

*Pat*

If there are any problems with this fax transmittal, please call the above phone number.

"Protect, Conserve, and Manage Florida's Environmental and Natural Resources"

Printed on recycled paper

XC: AL L. JACK PONS 12/10

**FAXED**  
12/10

Month xx, Year

Mr/Ms:  
Address  
City, Florida 33759

Dear Mr/Ms. Xxxxx:

Thank you for your letter regarding the proposed Sea Ray Boats Project in Merritt Island.

The Department of Environmental Protection (DEP) distributed an Intent to Issue with a draft permit on October 6. The DEP held a meeting at the Government Center in Viera on November 17 to inform the public about the project, the proposed action, and to receive questions and comments. The opportunity for comments was open for several weeks, and DEP received additional letters and E-Mails from the public about the project.

The DEP staff are reviewing all comments prior to making a final decision on this matter. I have sent a copy of your letter to them.

Thank you again for writing me to let me know about your concern. If you have any technical questions or need further information, please contact Al Linero, Division of Air Resources Management, Department of Environmental Protection, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or at 850/921-9523.

Sincerely,

Jeb Bush

JB/ka



*Sea Ray*

December 13, 1999

RECEIVED

DEC 16 1999

BUREAU OF AIR REGULATION

Florida Department of Environmental Protection  
Bureau of Air Regulations  
Twin Towers Office Bldg.  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Attn: C. H. Fancy, P.E.

Dear Mr. Fancy:

In view of the concerns about our new facility that are being registered with you by a group of our neighbors, I want to make you aware of steps we are taking here at Sea Ray to address those concerns. We recognize that these concerns are often genuine – and understandable given the largely inaccurate information that sustains them. At the same time, we acknowledge our responsibility to take the lead in helping our neighbors understand and view these issues more accurately.

To that end, we have taken two important initiatives to begin an open dialogue with our neighbors and to better inform the news coverage that they see and hear:

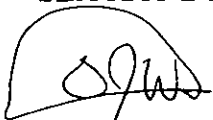
- We have contacted the homeowners associations in our community and invited them to meetings at our facility to open an ongoing dialogue. Our first priorities are to define their concerns and decide upon the best forum to address these concerns and work toward resolutions.
- We have scheduled an editorial board meeting with Florida Today to ensure that those editors have the full benefit of accurate scientific and technical information necessary to provide balanced coverage and place safety concerns in perspective. We will seek additional editorial board meetings with other news outlets that have an interest in these issues.

Based upon the outcome of these initiatives, we may decide upon additional steps to work toward informed community support for our proposed facility. We will keep you informed of our progress in that direction.

In the meantime, we appreciate the Department's continuing willingness to view objectively the issues raised by our neighbors and your constituents. Be assured that we at Sea Ray are fully committed to conducting our operations in a manner that protects the safety of our employees, public health and the environment.

Sincerely,

SEA RAY BOATS, INC.



Dennis J. Wilson  
Vice President/General Manager

DJW/ln

**FACSIMILE TRANSMISSION****GOLDER ASSOCIATES INC.**

6241 NW 23RD STREET  
GAINESVILLE, FLORIDA 32653 USA

TELEPHONE NO. (352) 336-5600  
FAX NO. (352) 336-6603

Date: December 1, 1999 Project No.: 9937586-0100  
FAX No.: (850)922-6979  
TO: Bureau of Air Regulation  
Florida Department of Environmental Protection  
ATTN: John Reynolds, P.E. and Cindy Phillips, P.E.  
FR: Kennard F. Kosky, P.E.  
RE: SEA RAY BOATS, INC. - CAPE CANAVERAL PLANT  
Total Number of Pages  
Hard Copy to Follow: X Yes  No (including this cover page): 7

**MESSAGE:**

John and Cindy:

Attached please find some additional suggestions to the Specific Conditions of the Draft Air Construction/PSD Permit for the Sea Ray Boats, Inc. Cape Canaveral Plant. These are being provided for review prior to the upcoming December 5, 1999 meeting scheduled at 10:00 a.m. with the Department. The recommended changes are based on the meeting held on November 16, 1999. The suggested changes are highlighted in the text, which I will summarize. The suggested changes to Condition 3 reflect grouping of the resins and gel coats as suggested by Cindy. The HAP content of the sprayed tooling resins was kept as an individual limit. In Specific Condition 4, a mechanism for determining compliance with grouped resins and gel coats is suggested. In Specific Condition 5, the phrase "in the lamination operation" as suggested in our original was omitted. In Specific Condition 12, the suggested changes included: 1. adding the phrase "capture for treatment" in the first sentence, 2. adding the phrase "attached to this permit" as related to the BACT Determination and 3. adding a phrase that indicates that the final NESHAP would apply as BACT if the full-scale system is not determined by the Department to be technically and/or economically feasible. I have also attached a Professional Engineer Certification for Specific Condition 12. As mentioned at the meeting that this would be required. Please call if you have any questions. Ken

cc: Al Linero, P.E.; FDEP; Kevin Thompson, Sea Ray Boats, Inc.; Pete Cantelou, P.E.; Angela Morrison, Esquire, HGS&S



**Golder  
ASSOCIATES**

The document(s) with this transmission are only for recipient(s) named above and contain privileged/confidential information. Unauthorized disclosure, dissemination, or copying of this transmission is strictly prohibited. If received in error, please destroy. Questions/problems with transmission: contact the receptionist at (352) 336-5600. PUBLIC/FORM/FAX.DOC

**AIR CONSTRUCTION PERMIT**  
**SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

The following specific conditions apply to the following emissions units:

EMISSIONS UNIT NO.	EMISSIONS UNIT DESCRIPTION
001	Building 101, Lamination & Assembly
002	Building 102, Fabrication
003	Accessory Structures

[Note: Emissions units 001, 002 and 003 are subject to PSD for VOC; subject to MACT for HAPs; and are subject to the requirements of the state rules as indicated in this permit. This permit includes the MACT requirements, and constitutes MACT for this project.]

**OPERATIONAL REQUIREMENTS**

- Hours of Operation: These emissions units may operate continuously, i.e., 8,760 ~~5,000~~ hours/year. [Rule 62-210.200, F.A.C., Definitions-potential to emit (PTE)]

As identified in the permit application, the facility and emission units will operate only 5,000 hours per year.

**MATERIAL USAGE/APPLICATION REQUIREMENTS AND LIMITATIONS**

- VOC and Styrene Emissions Limited: Emissions of volatile organic compounds (VOC) (including styrene) shall not exceed 211 tons prior to capture and control, and emissions of styrene shall not exceed 125 tons prior to capture and control, in any consecutive 12-month period. These emission rates are the total for all three project phases. [Rules 62-4.070(3), 62-204.800(10)(d)2., and 62-210.200 (PTE), F.A.C., and BACT/MACT]
- Resins and Gel Coats HAP Contents Limits: These emission units following components shall be limited to the following an aggregate maximum average limits (AMAL) for HAP contents of ~~all specified combinations~~ of resins and gel coats identified below. The AMAL for combinations are based on the following components as listed on the respective Manufacturer's Safety Data Sheets, expressed as percent by weight, and based on a 3-month rolling weighted average:
  - Production resins (pr), 35% total HAP content.
  - Pigmented gel coats (pgc), 33% total HAP content.
  - Base gel coats (bgc), 33% total HAP content.
  - Clear gel coats (cgc), 48% total HAP content.
  - Sprayed tooling resins (str), used for making and repair of molds, 30% total HAP content.
  - Non-atomized tooling resins (natr), used for making and repair of molds, 39% total HAP content.
  - Tooling gel coats (tgc), used for making and repair of molds, 40% total HAP content.

The AMAL for resins is the combination of production resins and non-atomized tooling resins and the AMAL for gel coats is for pigmented gel coats, base gel coats, clear gel coats and tooling gel coats. The HAP content for sprayed tooling resins is an individual limit.

[Rules 62-4.070(3) and 62-204.800(10)(d)2., F.A.C., and MACT]

It is suggested that this condition be changed to reflect an aggregate limit for all resins and gel coats used in the facility. This suggested change is consistent with what Sea Ray believes will be the final MACT promulgated by EPA and does not change the basis for the Department's MACT determination. An aggregate limits will also be more straightforward from both a compliance and enforcement perspective, since there will be one limit for which compliance must be demonstrated each 3-month period. Moreover, there will be no requirement to specifically define terms of each

Sea Ray Boats, Inc.  
 Cape Canaveral Plant

DEP File No. 0090093-003-AC  
 PSD-FL-274

**AIR CONSTRUCTION PERMIT**  
**SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS**

resin and gel coat.

4. **Records of Weighted Average HAP Contents Required:** The permittee shall keep and maintain the following records to demonstrate compliance with the HAP content limitations of the previous specific condition. Records shall be completed no later than five working days after the end of each month.
- Weight in pounds of each material used each month.
  - Weight percentage of total HAP (expressed as a decimal fraction) in each material using the highest value for each range listed on the Manufacturer's Safety Data Sheets.
  - Rolling 3-month weighted average total HAP content, expressed as a weight percentage, for each component specified in the previous specific condition, based on the materials used in the current month and preceding two months. The weighted average shall be calculated for each component by multiplying the weight of each material used during the three month period times the total HAP content of each material, totaling the results, and then dividing the resulting sum by the total weight of all materials. For example, for the production resins component, the 3-month weighted average for resins would be calculated as follows:

$$AMAPR_{avg} = \frac{(HAPa) WTa + (HAPb) WTb + \dots + (HAPi) WTi}{WTa + WTb + \dots + WTi} \times 100$$

Where,

- $AMAPR_{avg}$  = The 3-month weighted aggregate maximum average, expressed as a percentage, for all the combination of resins and gel coats the production resins component;
- $HAPi$  = The weight percentage of total HAP (expressed as a decimal fraction) in material i; and
- $WTi$  = The weight of material i used in the current month and preceding two months.

The AMA is compared to applicable 3-month weighted aggregate maximum average limit for resins calculated based on Condition 3 as follows:

$$AMAL = \frac{[(0.35 WTpr) + (0.32 WTlge) + (0.32 WTlbe) + (0.48 WTlge) + (0.20 WTlstr) + (0.39 WTnatr) + (0.4 WTlge)] \times 100}{(WTpr + WTlge + WTlbe + WTlge + WTlstr + WTnatr + WTlge)}$$

Where: WT is th 3-month average weight of components and designations are defined in Condition 3.

[Rules 62-4.070(3) and 62-204.800(10)(d)2., F.A.C., and MACT]

This condition was expanded to coincide with the suggested changes to Condition 3. This condition also identifies a very specific compliance point.

5. **Resin & Gel Coat Cleaning Solvents:** The owner or operator shall only use resin and gel coat cleaning solvents in the lamination operation to clean resin and gel coat equipment and tools which contain no HAP except for the use of solvent cleaning machines which comply with the requirements of 40 CFR 63 Subpart T – Halogenated Solvent Cleaning.  
 [Rules 62-4.070(3) and 62-204.800(10)(d)2., F.A.C., and MACT]

## AIR CONSTRUCTION PERMIT

### SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

The suggested change clarifies the condition that indicates non-HAP solvents will be used ~~in the process. For some maintenance activities when equipment is taken out of operation, some use of solvents containing HAPs are used.~~ Sea Ray does not current use or intends to use halogenated solvent cleaning machines. The condition was left as is, however.

6. Carpet and Fabric Adhesives: The permittee shall use carpet and fabric adhesives that contain no HAP. Excluded from this limit are aerosol adhesives and contact adhesives applied to nonporous substrates. [Rules 62-4.070(3) and 62-204.800(10)(d)2., F.A.C., and MACT]

The exclusion of aerosols was added which was consistent with the Department's addition in Condition 7.

7. Carpentry Adhesives: The owner or operator shall use carpentry adhesives which achieve a volatile HAP (VHAP) limit for contact adhesives of no greater than 0.2 kg VHAP/kg solids (0.2 lb VHAP/lb solids) as applied using either of the compliance methods in 40 CFR 63.804(e). Excluded from this limit are aerosol adhesives and contact adhesives applied to nonporous substrates. [Rules 62-4.070(3) and 62-204.800(10)(d)2., F.A.C., and MACT]

This condition was deleted and compliance for carpentry adhesives added to Condition 10 below to be consistent with Subpart JJ.

8. Non-atomizing Equipment Required: The owner or operator shall only use non-atomizing application equipment for production resins. Sea Ray shall submit an operation and maintenance plan and operator training plan including but not limited to equipment calibration methods to achieve maximum HAP reduction; [Rules 62-4.070(3) and 62-204.800(10)(d)2., F.A.C., and MACT]
9. No Controls Required: The owner or operator is not required to control emissions of HAP from mold sealing, releasing, stripping and repair materials. The owner or operator is not required to control emissions of HAPs from coating processes for exterior wood parts. [Rules 62-4.070(3) and 62-204.800(10)(d)2., F.A.C., and MACT]
10. Non-Structural Interior Wood Parts: The owner or operator shall only use finishing materials for interior wood parts which are compliant comply with 40 CFR 63 Subpart JJ – NESHAP for Wood Furniture Manufacturing Operations for carpentry adhesives and non-structural interior wood parts (e.g., cabinets, furniture and trim). [Rules 62-4.070(3) and 62-204.800(10)(d)2., F.A.C., and MACT]

In the construction of the hulls, bracing and other structural components of the large boats, wood is used with resins and gel coats that make complying with Subpart JJ requirements inappropriate. Subpart JJ was promulgated and appropriate for non-structural interior wood parts, such as cabinets, furniture and trim.

11. Bottom Coatings & Other Exterior Coatings: The owner or operator shall only use bottom coatings and any other exterior coatings (except for wood parts) which are compliant with 40 CFR 63 Subpart II – NESHAP for Ship Building and Ship Repair (Surface Coating). [Rules 62-4.070(3) and 62-204.800(10)(d)2., F.A.C., and MACT]

## AIR CONSTRUCTION PERMIT

## SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

## CONTROL SYSTEMS REQUIRED/EMISSION LIMITS

12. VOC/HAP Capture and Control System Required: Emissions Unit 001 shall be equipped with a pilot-scale capture system ducted to a control system sized to capture for treatment at least 10,000 cfm of VOC/HAP-laden air exhausted from the hull lamination process. Within 180 days following commencement of hull or deck lamination processing, the permittee shall submit its proposed design for ~~a 10,000 cfm VOC/HAP BACT~~ the pilot-scale control system to the Department's Bureau of Air Regulation for approval. The permittee shall provide written notice of the lamination commencement date to the Bureau of Air Regulation and the Department's Central District Office. The design submittal shall contain all data necessary to evaluate the system's performance capabilities. The pilot-scale control system ~~must~~ can utilize, but not limited to, one or more of the following: a localized pickup system, a permanent booth enclosure or a movable-enclosure venting and capture system. The system shall be designed ~~and operated~~ to capture ~~at least 80~~ at least 80 percent of the total VOC and HAP emissions generated ~~from a portion of~~ from the hull lamination process while destroying 95 percent of the captured VOCs. The Department shall notify the permittee within 30 days of receipt of the design proposal as to whether it will be accepted as the pilot-scale control system BACT. If the proposal is not approved, the Department shall notify the permittee within the same 30 day period as to what modifications are required to make the proposal acceptable. Construction of buildings and installation of process equipment may begin upon issuance of this PSD permit. Operation of the lamination process may continue provided the permittee meets the timeframes established by this condition for submittal of notifications, reports and tests. The permittee shall have a period of one year following the Department's written approval of the design to install and commence operation of the pilot-scale BACT system. Quarterly progress reports detailing the status of the pilot project shall be submitted to the Bureau by the permittee during the one year construction period of the pilot-scale system. The permittee shall notify the Bureau and the Department's Central District Office at least 15 days in advance of the startup date of the pilot project. Within one year following commencement of operation of the pilot system, and after notifying the Bureau and the Central District Office at least 15 days in advance, the permittee shall conduct a capture efficiency test and a VOC/HAP destruction efficiency test on the system according to the procedures specified below in Specific Conditions No. 15 and 16. Results of these tests shall be submitted to the Department with 45 days after completion. Within 60 days after completion of the tests the permittee shall submit to the Department an engineering report providing information on the technical and economic feasibility of a full-scale system. ~~Unless the test results or other data provided by the permittee convince~~ The Department that shall determine whether a full-scale system is not technically and economically feasible based on the criteria discussed in the BACT Determination attached to this permit. ~~from a technical, operational or cost standpoint, if a full-scale system is determined not to be technically and economically feasible, the pilot-scale system shall be removed without further regulatory review and the final NESHAP promulgated by EPA for new boat manufacturing operations (40 CFR Part 63) shall apply as BACT.~~ If a full-scale system is determined to be technically and economically feasible, the Department shall propose to revise this PSD permit to reflect the revised BACT determination. The Department shall provide one additional year for installation of a full-scale control system ~~after its determination based on the pilot system~~. The full-scale system, which may augment or replace the pilot-scale control system, shall be designed to capture ~~at least 80~~ at least 80 percent of the total VOC/HAP emissions generated from the hull and deck lamination process while destroying at least 95 percent of the captured VOCs. Appropriate emission limits and compliance requirements for the full-scale VOC/HAP control system shall be established by the Department within 45 days following receipt of test results ~~for the pilot-scale system~~ the engineering report and

Sea Ray Boats, Inc.  
Cape Canaveral Plant

DEP File No. 0090093-003-AC  
PSD-FL-274

**Golder Associates Inc.**

6241 NW 23rd Street, Suite 500  
Gainesville, FL 32653-1600  
Telephone (352) 336-6600  
Fax (352) 336-6603



December 1, 1999

9937586

Florida Department of Environmental Protection  
New Source Review Section; Bureau of Air Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Attention: A.A. Linero, P.E., Administrator

RE: DEP File Nos. 0090182-001-AC, 0090093-003-AC, PSD-FL-274  
Sea Ray Boats, Inc. - Cape Canaveral Plant

Dear Al:

This correspondence is a Professional Engineer certification of the Control System Requirements contained in the revised version of Specific Condition 12 of the Draft Air Construction Permit for the Sea Ray Boats, Inc. Cape Canaveral Plant (Attachment A). Equipment is available from manufacturers for the purpose of capturing and controlling volatile organic compounds (VOCs) emissions from a portion of the hull/deck lamination process. The Prevention of Significant Deterioration (PSD) evaluation contained vendor information demonstrating that a system could be designed to capture at least 80 percent of the total VOC emissions in a pilot-scale system (e.g., on a hull/deck) and destroy 95 percent of the captured VOCs. The development of the pilot-scale system will involve designing a system that captures at least 80 percent of the VOCs with an air flow rate of at least 10,000 cubic feet per minute (cfm) from a portion of the process (i.e., large enough to capture VOCs from the lamination of one hull/deck), while destroying 95 percent of the captured VOCs. It is envisioned that the pilot-scale system will evaluate:

- The ability to capture VOCs from the construction of large boat hulls/decks (e.g., approximately 65 feet in length) under several air flow conditions,
- The overall VOC destruction efficiency of the control device,
- The ability of workers to perform their job functions,
- The occupational exposure of workers to VOCs in the pilot-scale system, and
- The cost effectiveness and technical feasibility of a full-scale VOC control system for the Cape Canaveral Plant that maintains worker health and safety.

To the best of my knowledge, there is reasonable assurance that the pilot-scale system described in revised Specific Condition 12 (Attached), when properly operated and maintained, can meet the objectives of revised Specific Conditions 12 as described in the draft permit and in this correspondence. The engineering features of a conceptual pilot-scale system, as described in revised Specific Condition 12 and as outlined in this

Florida Department of Environmental Protection  
A. A. Linero, P.E.

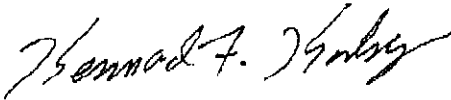
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December 1, 1999  
9937586

correspondence, conforms with sound engineering principals for the purpose of determining the technical feasibility and costs for the full-scale capture and control of VOC emissions from the lamination of large boat hulls and decks while protecting worker health and safety. Please call if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.



Kennard F. Kosky, P.E.

Principal

Professional Engineer Registration Number: 14996

KFK/jkk

cc: G. E. (Pete) Cantelou, Jr., P.E., Cantelou, Herrera & Powell, Inc.  
Kevin Thompson, Sea Ray Boast, Inc.

7/5/99  
Seal



**Golder Associates Inc.**

6241 NW 23rd Street, Suite 500  
Gainesville, FL 32653-1500  
Telephone (352) 336-5600  
Fax (352) 336-6603



December 1, 1999

9937586

Florida Department of Environmental Protection  
New Source Review Section; Bureau of Air Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Attention: A.A. Linero, P.E., Administrator

RE: DEP File Nos. 0090182-001-AC, 0090093-003-AC, PSD-FL-274  
Sea Ray Boats, Inc. - Cape Canaveral Plant

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- The overall VOC destruction efficiency of the control device,
- The ability of workers to perform their job functions,
- The occupational exposure of workers to VOCs in the pilot-scale system, and
- The cost effectiveness and technical feasibility of a full-scale VOC control system for the Cape Canaveral Plant that maintains worker health and safety.

To the best of my knowledge, there is reasonable assurance that the pilot-scale system described in revised Specific Condition 12 (Attached), when properly operated and maintained, can meet the objectives of revised Specific Conditions 12 as described in the draft permit and in this correspondence. The engineering features of a conceptual pilot-scale system, as described in revised Specific Condition 12 and as outlined in this

Florida Department of Environmental Protection  
A. A. Linero, P.E.

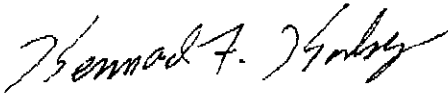
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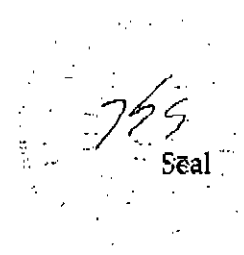
correspondence, conforms with sound engineering principals for the purpose of determining the technical feasibility and costs for the full-scale capture and control of VOC emissions from the lamination of large boat hulls and decks while protecting worker health and safety. Please call if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.



Kennard F. Kosky, P.E.  
Principal  
Professional Engineer Registration Number: 14996



KFK/jkk

cc: G. E. (Pete) Cantelou, Jr., P.E., Cantelou, Herrera & Powell, Inc.  
Kevin Thompson, Sea Ray Boast, Inc.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

AL

NOV 30 1999

RECEIVED

DEC 06 1999

4APT-ARB

Mr. C. H. Fancy, P.E., Chief  
Bureau of Air Regulation  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

BUREAU OF AIR REGULATION

SUBJ: PSD Preliminary Determination and Draft Permit for Sea Ray Boats, Inc.  
Cape Canaveral Plant, Merritt Island, Florida  
Permit No. 0090093-003-AC (PSD-FL-274)

Dear Mr. Fancy:

Thank you for your submittal dated October 6, 1999, containing a prevention of significant deterioration (PSD) preliminary determination, draft permit, and Section 112(g) case-by-case maximum achievable control technology (MACT) evaluation for the above referenced facility. Sea Ray Boats, Inc. (Sea Ray) proposes to construct an additional fiberglass boat manufacturing facility in Merritt Island, Florida. Sea Ray refers to this additional facility as the Cape Canaveral Plant. In accordance with a previous determination by the Florida Department of Environmental Protection (FDEP) endorsed by the Region 4 office of the U.S. Environmental Protection Agency (EPA), the Cape Canaveral Plant is a modification of the existing Sea Ray Merritt Island manufacturing facility (the Merritt Island Plant) which is a major source for PSD permitting purposes. Since potential volatile organic compounds (VOC) emissions from the Cape Canaveral Plant exceed the PSD significant emission rate level, the Cape Canaveral Plant is subject to PSD review for VOC.

EPA Region 4 commends the thoroughness of your review and agrees with your determination that best available control technology (BACT) for VOC should include a pilot-scale program to assess the feasibility of capturing and destroying VOC emissions. Condition 12 in Section III of the draft permit and the BACT/MACT determination on page BD-21 both describe a schedule for implementing a VOC capture and control system. These two schedule descriptions differ slightly. Condition 12 appears to allow 30 months from commencement of the lamination process until the time at which a capture efficiency test and VOC destruction test of the pilot-scale control system are required. (This schedule is based on an allowance of 6 months from lamination process commencement to the submittal of a design for the pilot-scale system, an additional 12 months to install and begin operation of the system, and 12 more months to conduct a capture efficiency test and VOC destruction efficiency test.) The BACT determination, on the

other hand, states that the capture efficiency test and VOC destruction efficiency test should be completed by "the end of the twenty-fourth month" after lamination commences. The difference between the two schedules appears to be the assumption in the BACT determination that a reasonable time for test completion after startup of the pilot-scale system is six months rather than the 12 months allowed in the draft permit. We recommend that FDEP review the two schedules and decide which is preferred for the final permit. Either is acceptable to EPA Region 4.

If you have any questions concerning this letter, please contact Jim Little of the EPA Region 4 staff at (404) 562-9118.

Sincerely,

David A. McNeal  
for

R. Douglas Neeley  
Chief

Air and Radiation Technology Branch  
Air, Pesticides and Toxics  
Management Division

cc: J. Reynolds, BAR  
C. Phillips, BAR  
L. Kozlov, CD  
NPS  
C. Rowe  
D. Sphar, Sierra Club  
P. Castelou, SR  
A. Morrison, HG STS  
R. Yunis



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Merritt Island National Wildlife Refuge  
P.O. Box 6504  
Titusville, Florida 32782



November 23, 1999

RECEIVED

NOV 29 1999

BUREAU OF AIR REGULATION

Mr. Al Linero  
New Source Review Section  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32399

Dear Mr. Linero:

I am writing to comment on the Sea Ray Boat manufacturing plant proposed along the barge canal in Brevard County. As manager of Merritt Island National Wildlife Refuge, I want to address an issue of concern to us. The refuge southern most boundary intersects the north shore of the barge canal. This particular part of the refuge is described as scrubby flat woods and harbors the federally threatened Florida scrub jay. Periodically we conduct prescribe burns to enhance the recovery of this species and to reduce hazardous fuel loads.

The normal protocol is to ignite the fires in this area with a southwest wind to minimize smoke management issues in the surrounding community. I do not expect this smoke to impact their operation. Conversely I do not want their release of styrene and other harmful chemicals to impact the refuge mandate to conduct prescribe burns nor to place my firefighters in any additional hazard.

I request that you evaluate and assess our concerns as you move to issuance of the necessary permits.

Sincerely,

Ron Hight  
Refuge Manager

CC: J. Reynolds, BAR  
C. Phillips, BAR  
L. Kozlov, CD  
EPA  
C. Rowe  
D. Sphar, Sierra Club  
P. Cantelou, SR  
A. Morrison, H&S+S

## Objectionable Odor Report

**Time:** 3:00 - 3:30 p.m.

**Date:** November 17 (prepared November 20, 1999)

**City:** Merritt Island, Brevard County

**Location:** Sea Ray Drive between Highway 3 and Sykes Creek

**Wind:** Approximately from the East and clearly greater than 10 miles per hour

**Ambient Conditions:** 70-80 degrees, partly cloudy

**Observer:** A A. Linero, P.E. Administrator, New Source Review Section, Bureau of Air Regulation.



**Other details:** I entered Sea Ray Drive (parallel to SR 528) from Highway 3. Passengers (Russ Wider and Cindy Phillips) immediately commented on an odor. We proceeded along Sea Ray Drive on the short stretch where it lies along a West Northwest and East Southeast axis. I detected what I term as an objectionable odor and simultaneously experienced an irritating effect on my throat. It was detected immediately South of the Merritt Island Plant and West of the Product Engineering and Development Plant and the Sykes Creek Plant. The odor was the same as I encountered inside of Sea Ray's Sykes Creek Lamination Building in September. However, this time I experienced it off of Sea Ray's property on a public road.

Shortly after first experiencing the odor, I turned off the fan and closed the vents inside the car in response to the reaction of Russ Wider who was recovering from a cold. We continued East on Sea Ray Drive to the site of the Cape Canaveral Project. We observed that the Fabrication Building and Administrative Annex have been erected based on an external observation.

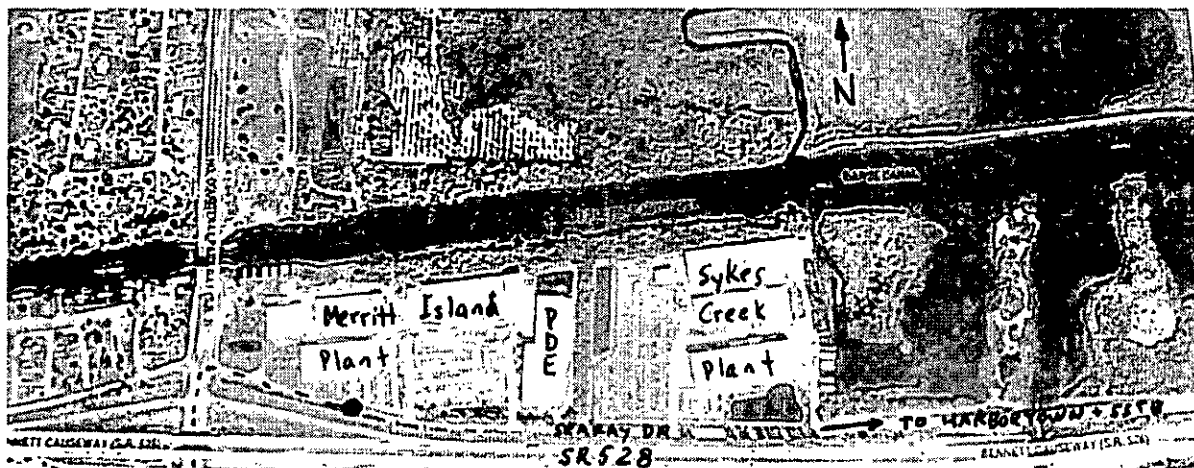
We turned back and stopped at Harbortown (upwind of the Sykes Creek Plant and downwind of the Cape Canaveral Project Site). We got out and did not detect any odors. From our vantage point, we observed the placement of construction equipment behind the Fabrication Building.

We got back into the car and proceeded (with windows closed and fan off) towards Highway 3. We promptly left the area to avoid exposing ourselves (particularly Russ) to the unpleasant agent.

**Conclusion:** Based on the observations above, Sea Ray was the source of the objectionable odor and irritant.

**Recommendation:** Follow up by conducting a survey downwind of Sea Ray based on weather predictions. Concentrate if possible on a day(s) when winds blow into a nearby neighborhood. A number of people have commented on odors near Sea Ray that are consistent with my observations. I sent Len Kozlov the comments I received by E-Mail.

**Other** After the November 17 Public Meeting, I mentioned the incident to Kevin Thompson, Director of Environmental Affairs at Sea Ray. I urged him to consider control equipment for the new project. He made no comments. I also informed one of Sea Ray's consultants, Mr. Kosky of Golder Associates, of the incident and my suggestion for the new project.



Initial Path

**FLORIDA DEP AIR PERMITTING SUMMARY SHEET**  
**SEA RAY BOATS – CAPE CANAVERAL PLANT**  
**PUBLIC MEETING – BREVARD COUNTY**  
**NOVEMBER 17, 1999**

Sea Ray Boats, Inc. is proposing to construct a new fiberglass boat plant near its existing facility on Sea Ray Drive on Merritt Island in Brevard County. The purpose of the new plant is to allow the company to build bigger boats than they already build at the existing facility.

Sea Ray will employ the industry standard process known as “contact open molding” at the new plant. The significant air emissions will consist of volatile organic compounds including styrene – a hazardous air pollutant. These result primarily from the application and curing of gel coat and resin that is applied to various molds for the boat parts.

The Florida Department of Environmental Protection (DEP) is the permitting authority for the air construction permit under the provisions of Florida Statutes, the Florida Administrative Code, and our EPA-approved State Implementation Plan per the Code of Federal Regulations.

The DEP received an air permit application and fee on May 5. The application was updated on July 19 to include a proposal for the Maximum Achievable Control Technology (MACT) to control HAPs. Additional information was provided on September 3, including an analysis of requirements pursuant to the Prevention of Significant Deterioration of Air Quality (PSD). The update included an analysis of Best Available Control Technology (BACT) for the control of VOCs. A supplementary fee was submitted on September 30 to complete the \$7,500 processing fee for PSD permits. The company advised, however, that it reserves the right to challenge the applicability of PSD permitting when the Intent and proposed permit are issued.

Copies of the application materials were made available to the EPA Region 4 in Atlanta, the Department of Interior Fish and Wildlife Service Air Quality Branch in Denver, the DEP Central District Office in Orlando and the Brevard County Office of Natural Resource Protection. On August 11, the EPA provided its opinion that the project is subject to PSD.

The Technical Evaluation and Preliminary Determination and the draft air permit were completed and sent to the applicant along with the Department's Intent to Issue on October 6. Copies were provided to the same agencies and to certain members of the public who specifically requested them. Copies were made available for public inspection at DEP offices in Tallahassee and Orlando, as well as the Brevard County Office of Natural Resource Protection.

The Department published the Public Notice of Intent to Issue an Air Construction Permit in Florida Today on October 31. Within the Notice, we advised the venue for this public meeting. We also provided Notice of this public meeting in the Florida Administrative Weekly on November 5.

The Public Notice of Intent provides a 30 day period for anyone to submit comments on the Department's proposed action. It also provided a 14 day period for anyone whose substantial interests were affected by the project to file a petition for an administrative hearing. Some comments have already been received from Sea Ray. We have received a few questions from the public including specific requests to hold this meeting.

This public meeting will provide the public an opportunity to comment on the proposed permit. Both the application and the Intent to Issue package are still available for public review and copying at the Department's Orlando and Tallahassee offices. We brought with us copies of the key documents in hardcopy versions and on floppy disks in WORD Format. If we run out, we will send copies by mail or E-Mail. Mr. Reynolds of our staff will explain how to access the same information on the Department's Website.

The Department will accept comments today and until November 30. In a sense we consider this meeting open until then. We will consider all relevant comments specifically related to air emissions. These comments as well as those of Sea Ray, EPA and other agencies will be considered in issuing a final permit decision.

Comments may be submitted at this public meeting or sent to:

CONTACT: A. A. Linero, P.E. Administrator  
New Source Review Section  
Bureau of Air Regulation  
2600 Blair Stone Road, MS 5505  
Tallahassee, Florida 32399  
Tel: (850)921-9523  
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Following is a list of contacts within the Department who can assist with questions regarding air permitting and other matters related to the Sea Ray Project:

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Tel: (850)921-9624



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**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
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 Cartelou, Herrera + Powell  
 1400 Sarno Rd  
 Melbourne, FL 32935

4a. Article Number  
 2 333 618 186

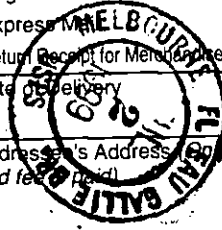
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PS Form 3811, December 1994

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PS Form 3800, April 1995

1 FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
2 BREVARD COUNTY PUBLIC MEETING  
3 RE: AIR PERMITTING - SEA RAY BOATS, CAPE CANAVERAL PLANT

4  
5 November 17th, 1999, 7:30 p.m.  
6 Held at the Brevard County Commission Chambers  
7 Building C, County Government Center  
8 2825 Fran Jamieson Way, Viera, Florida

9 ORIGINAL

10 Department of Environmental Protection Agency Officials:

11 AL A. LINERO, P.E., Administrator  
12 New Source Review Section  
13 Bureau of Air Regulation  
14 2600 Blair Stone Road, MS 5505  
15 Tallahassee, Florida 32399  
16 (850) 921-9523

17 RUSSELL A. WIDER, E.I.  
18 Air Toxics Unit  
19 Bureau of Air Regulation, Tallahassee  
20 (850) 921-9585

21 JOHN REYNOLDS, Engineer  
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3900 Commonwealth Boulevard MS-35  
Tallahassee, Florida 32399-3000  
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1 THEREUPON:

2 MR. WIDER: Good evening. Can everybody hear  
3 me? I am Russell Wider and I'm an engineer with the  
4 Department of Environmental Protection with the Air  
5 Resource Management Division, and this evening we're here  
6 to have a public meeting concerning the air construction  
7 permit to be issued to Sea Ray Boats, Incorporated, for a  
8 fiberglass boat manufacturing plant that's to be  
9 constructed on a 30-acre tract located approximately 1.2  
10 miles east of Sea Ray's existing Sykes Creek facility in  
11 Merritt Island, Florida.

12 This meeting tonight is to deal with the air  
13 pollution issues as they relate to this permit. This is  
14 not a meeting about zoning issues. I really would  
15 appreciate if you would keep your comments concerning  
16 those issues out of it. We're here to deal with air  
17 pollution issues and take comments on those.

18 We have a bunch of comment cards in the back  
19 of the audience there. Miss Kim Tober, would you raise  
20 your hand, please. Thank you. We have a bunch of  
21 handouts back there that you might want to look at, and  
22 there's public cards and comment cards that can be mailed  
23 in.

24 First off, we have Mr. Al Linero. He's going  
25 to be presenting the state and federal air permitting

1 requirements applicable to Sea Ray's proposed new  
2 fiberglass boat manufacturing plant. Al.

3 MR. LINERO: Thank you. I'll step down  
4 here. Can people hear me from here? Okay. Good.  
5 Okay. Well, first of all, I want to thank everybody for  
6 coming out here and thank you, whoever got us, you know,  
7 this -- maybe it was you -- who got us this place. We  
8 really appreciate it. We appreciate the commission  
9 letting us use the facilities here for this, for this  
10 important meeting.

11 Any rate, Sea Ray -- Sea Ray's proposing to  
12 construct a new fiberglass boat plant near its existing  
13 facility on Sea Ray Drive in Merritt Island, Brevard  
14 County. The purpose of the new plant is to allow the  
15 company to bigger -- build bigger boats than they already  
16 build at the existing facility.

17 Sea Ray will employ the industry's standard  
18 process known as contact open molding at the new plant.  
19 The significant air emissions will consist of volatile  
20 organic compounds, including styrene, which is a  
21 hazardous air pollutant. These result primarily from the  
22 application and curing of gel coat and resin that is  
23 applied to the various molds for the boat parts.

24 The DEP is the permitting authority for air  
25 construction permits under the provisions of the Florida

1 Statutes, the Florida Administrative Code, and our  
2 EPA-approved State Implementation Plan per the Code of  
3 Federal Regulations.

4 We received a permit application and fee on  
5 May the 5th. The application was updated on July 19th to  
6 include a proposal for the Maximum Achievable Control  
7 Technology, and that's the technology that's required to  
8 control the HAPs. Additional information was provided on  
9 September 3rd, including an analysis of the requirements  
10 pursuant to the Prevention of Significant Deterioration  
11 of Air Quality, otherwise known as PSD. The update  
12 included an analysis of Best Available Control Technology  
13 with the control of VOCs. A supplementary fee was  
14 submitted on September 30th to complete the processing  
15 fee. The company advised, however, that it reserves the  
16 right to challenge the applicability of the PSD permit  
17 when the intent and proposed permit are issued.

18 Copies of the application materials were made  
19 available to EPA Region 4 in Atlanta, the Department of  
20 Interior's Fish and Wildlife Service in Denver, the DEP  
21 Central Office in Orlando, and the Brevard County Office  
22 of Natural Resource Protection. On August 11th, the EPA  
23 provided its opinion that the project is subject to PSD.  
24 The technical evaluation and preliminary determination  
25 and the draft air permit were completed and sent to the



1 applicant along with the Department's Intent to Issue on  
2 October 6th. Copies were provided to the same agencies  
3 and to certain members of the public who specifically  
4 requested them. The copies were made available for  
5 public inspection at our offices in Tallahassee and  
6 Orlando, as well as here in Brevard County.

7 The Department published the Public Notice of  
8 Intent to issue an air construction permit in Florida  
9 Today on October 31st. Within the notice we have advised  
10 the venue for this public meeting. We also provided  
11 notice of this public meeting in the Florida  
12 Administrative Weekly on November 5th.

13 The Public Notice of Intent provides a 30-day  
14 period for anyone to submit comments on the Department's  
15 proposed action. It also provided a 14-day period for  
16 anyone whose substantial interests were affected by the  
17 project to file a petition for an administrative  
18 hearing. Some comments have already been received from  
19 Sea Ray. We've received some questions from the public,  
20 including the specific request to hold this meeting.

21 This, this meeting will provide for an  
22 opportunity to comment on the proposed permit that was  
23 distributed. Both the application and the Intent to  
24 Issue package are still available for public review and  
25 copying at the Department's Orlando and Tallahassee

1 office -- offices. We brought with us some copies of the  
2 key documents in hard copy format, and we have about 40  
3 of them back there. We also brought copies on floppy  
4 disks so you can take those home and read them over at  
5 your leisure. Requires Word -- Word 7 format. If we run  
6 out, we can send copies by mail, hard copy or diskettes,  
7 or we can even e-mail these to you. Mr. Reynolds of our  
8 staff will, will describe how to access the same  
9 information, we think, on our worldwide web site.

10 We'll accept comments today and until November  
11 30th. In the sense we consider this meeting open until  
12 then, we will consider all relevant comments specifically  
13 related to the air emissions. These comments, as well as  
14 those of Sea Ray, EPA, other agencies will be considered  
15 in the final permit decision.

16 You can submit your comments to me  
17 personally. I have my name and address listed here, my  
18 phone number, my internet address. We have a list of  
19 contacts, as well, within the Department regarding  
20 permitting, permitting and any other matters related to  
21 Sea Ray project. We have contact for public records.  
22 That's Kim Tober, and she's back there. For air  
23 permitting, John Reynolds, who's right over here.  
24 Matters regarding air toxics, Cindy Phillips. We've got  
25 her phone number here, too, and she's right over there.

1 Air compliance, the central district's office, Len  
2 Kozlov, he's here today, and our legal contact is Doug  
3 Beason. He's on a -- he's on a different project today  
4 and Scott Goorland is here, but we have Doug's name and,  
5 name and phone number.

6 Anyhow, what I thought I'd, what I thought I'd  
7 do, hopefully, quickly, and I need to know if I get  
8 bogged down, is just run through quickly the technical  
9 evaluation that we distributed. I know you'll be reading  
10 it and you'll have it at home to look at, but let's just  
11 go through it real quick and then the details of the MACT  
12 and the BACT analysis will be handled by the engineers  
13 back here.

14 Any rate, let me bring that one up. I told  
15 somebody, I told somebody this was a picture we shot from  
16 the DEP air pollution observation balloon, and I was just  
17 kidding. You know, they said we didn't know you had that  
18 up there. But that's the Sea Ray existing facility on  
19 Merritt Island. You can see the Barge Canal there. In  
20 the foreground are the three existing plants. The  
21 Merritt Island plant is the one in the foreground, then  
22 you have their product development and engineering  
23 facility, followed by the Sykes Creek plant. And if you  
24 can, if you can visualize it -- I'm not sure how well you  
25 can see this -- then you have Sykes Creek and then, .

1 perhaps, another mile or so after Sykes Creek you have  
2 the new -- the proposed site.

3 Let me see if I can get this up. Okay. Now,  
4 where did I go? There it is. All right. There it is.  
5 Well, that's what I get for getting an Intel substitute.  
6 There we go. Oh, there we go. Oh, this is tough.  
7 Okay. Anyhow, this is the document that we distributed  
8 on the 6th of October. What we have here and in the  
9 handout, of course, is the applicant's name, the key  
10 dates here for the various documents that, that we  
11 receive, the permitting schedule. As we know, the  
12 existing site is located at 100, 200 and 350 Sea Ray  
13 Drive, south of the Barge Canal and east of Highway 3 on  
14 Merritt Island. The facility is approximately 190  
15 kilometers east of the Chasawiska National Wilderness  
16 area, and we've got a map up there that just was  
17 downloaded, Yahoo Maps that shows roughly -- there we  
18 go. That star right there is where the facility is, and  
19 it's just off highway -- yes, sir?

20 MR. ROWE: Are you expecting us to see that?

21 MR. LINERO: We'll bring you a copy and --  
22 we'll bring you a copy, if you like. I've got one.  
23 We'll bring you one. Kim, could you give Mr. Rowe his  
24 own copy?

25 Yeah, you're right, Clarence, this is tough to

1 see, but we got, we got some copies. We' got floppy  
2 disks, too. Okay. Yeah. The new plant, the new plant  
3 is going to be about 1.2 miles east of the existing  
4 facility. If you look at your own copies, if you have  
5 them, you know, the facility is indicated right there  
6 next to Highway 3, and on the other side of Sykes Creek  
7 and just ahead of the Banana River is the new location of  
8 the Cape Canaveral Plant.

9 The facility, the facility is categorized as a  
10 major or Title V source of air pollution because  
11 emissions of volatile organic compounds exceed 100 tons  
12 per year. That's to say that the emissions from the  
13 existing facilities already exceed 100 tons per year of  
14 volatile organic compounds. Oh, I can point. Okay. All  
15 right. And it's also a major facility with respect to  
16 the rules for the Prevention of Significant Deterioration  
17 because emissions of VOCs also exceed 250 tons per year.

18 The project addresses the following emissions  
19 units at the, at the plant. There's a lamination and  
20 assembly building. It's Building 101, consisting of  
21 88,400 square feet building and additions, including  
22 72,000 square feet housing gel coat and lamination  
23 application area, assembly space and inspection cutting  
24 area.

25 Secondly, there's a fabrication -- there's a

1 fabrication, and that's in a 48,000 square foot building,  
2 including additions of which half is fabrication area and  
3 half are support areas, including the wood shop, and in  
4 addition to that there's administrative areas. Then  
5 there are accessory structures such as resin and material  
6 storage, marine fueling, et cetera.

7 So what we did here, we listed, we listed,  
8 again, the main emission sources are the buildings  
9 themselves, and the main one is the lamination and  
10 assembly, and assembly area. The emissions points are at  
11 55 feet above grade and they consist of a number of  
12 structures that vent the lamination and assembly area.  
13 Most of these are on the order of 15 to 40,000 actual  
14 cubic feet a minute.

15 Emissions from the proposed plant for the, for  
16 all the phases were estimated by the applicant as 211  
17 tons per year of volatile organic compounds, including  
18 149 tons per year of hazardous air pollutants, of which  
19 125 are styrene.

20 That's better. Thank you.

21 Okay. The process, the process is called  
22 contact open molding. The specific steps employed by Sea  
23 Ray are mold maintenance, gel coat application, gel coat  
24 holding, lamination, that is, resin and wood application,  
25 extraction of parts from the molds, parts inspections,

1 repair, wood shop activities, upholstering, assembly,  
2 testing, final finishing, inspecting and delivery.

3 The gel coat is a pigmented polyester resin  
4 that forms the smooth visible surface of the molded  
5 piece. Gel coat application can be a high technology  
6 operation. In some cases, if parts, if parts are small  
7 enough, they, they, in some operations they'll have  
8 robotic application of gel coat inside an enclosed area.  
9 That's, we know that that's feasible for smaller boats.  
10 We don't know what the precise techniques would be at  
11 Cape Canaveral, but they're probably going to be  
12 different than the photograph, depending on the  
13 particular model and so forth and whether it's suited for  
14 a production run or is a unique product.

15 The gel coat and curing and hardening, it  
16 leaves a tacky surface on the open side of the mold and  
17 promotes the adherence of the subsequent first layers of  
18 laminate. Then you have layers of resin, fiberglass  
19 laminate and structural reinforcement materials that are  
20 progressively added and cured until the desired thickness  
21 is attained.

22 Sea Ray employees -- two variations. One is a  
23 hand layup that relies on resin application with a  
24 catalyst injection resin, followed by application of a  
25 variety of fiberglass reinforcement.

1           The second one, and I don't think it's one  
2           that they would be using here, is a chopper gun  
3           application of resin and chopped fiberglass. The choice  
4           depends on the strength of the requirement of the  
5           particular component. And Sea Ray's proposing to use  
6           non-atomizing methods for this new plant.

7           Again, most of the emission are generated in  
8           the application and the curing of the laminates. These  
9           consist primarily of styrene monomer. That is evolved  
10          prior to completion of polymerization.

11          Trimming is performed by grinding enclosed  
12          booths. Because of the presence of very efficient  
13          filters, Sea Ray believes that very little particulate  
14          matter will leave the buildings. Styrene and other VOCs  
15          evolved are extracted by the ventilation system and  
16          emitted from the buildings at ambient conditions from 11  
17          55-foot stacks.

18          I've listed here the rule applicability. The  
19          VOC emissions from three phases I mentioned are 211.  
20          Since the project, since the facility already exceeds  
21          250, this is, this level is sufficient to require this  
22          review under the rules for PSD. Sea Ray believes that  
23          the project is a separate facility on it's own and not  
24          subject to PSD because it will emit, by itself, the new  
25          plant will emit less than 250, and they provide the



1 rational that you can, that you can read in the handout.

2 We reviewed the matter and preliminarily  
3 determined that it's a single facility, that is, that the  
4 new plant and the existing facility are really one plant,  
5 and that's because our definition of a facility is all  
6 the emission units that are located on one or more  
7 continuous or adjacent properties and which are under  
8 control of the same person or persons under common  
9 control, and we determined that that was obvious that  
10 they're under the same general manager.

11 The -- we determined that the, that the  
12 new plant is actually adjacent, based on the meaning of  
13 the word adjacent, which is really just close to, lying  
14 near, adjoining. We consider that lying near, a mile  
15 away was close enough for this facility or for this plant  
16 to be considered adjacent.

17 EPA reviewed, reviewed our determination, or,  
18 actually, they independently did their own determination  
19 and came to the same conclusion that it's one facility.  
20 And, again, the importance there is that if it's one  
21 facility, then this requirement for Best Available  
22 Control Technology applies, otherwise, otherwise, it  
23 doesn't, but there's still another level of technology  
24 called Maximum Achievable Control Technology that they  
25 would be installing anyway.

1                   Again, we did this, we did a similar  
2                   determination for that applicability of this MACT  
3                   technology for the control of hazardous air emissions.  
4                   We detail in here the -- in a nutshell, the air pollution  
5                   control technology, a short discussion on ambient air  
6                   quality impacts, and we describe again the permit  
7                   processing.

8                   We, we conducted our own review of control  
9                   technology and, again, John Reynolds and Cindy Phillips  
10                  will be presenting that. The determination we came up  
11                  with is more stringent than the applicant's proposal, so,  
12                  so far we don't know what they're actually going to  
13                  install. We're working with them on a final decision on  
14                  that, but we determined the, the control system that  
15                  needs to be installed here. We're proposing it. And at  
16                  some point we'll reach a level of assurance through  
17                  negotiations and consideration of your input, as well as  
18                  those from the agency, from the various agencies.

19                  So, but, our review still shows that they,  
20                  that the proposed project, in any case, will not cause a  
21                  violation of any air quality standard or PSD increment.

22                  Russ, do you want to -- should we have the  
23                  other guys make their presentations--

24                  MR. WIDER: Yes.

25                  MR. LINERO: -- or open it up for questions

1 afterwards?

2 MR. WIDER: Yes.

3 MR. LINERO: Okay. Thank you very much.

4 MR. WIDER: Thank you, Al.

5 Next, we have a presentation on the Clean Air  
6 Act's requirements and the Florida regulations applicable  
7 to the emissions of hazardous air pollutants, otherwise  
8 known as HAPs. This includes a case-by-case MACT  
9 determination, which is the Maximum Achievable Control  
10 Technology, and this presentation will be given by Cindy  
11 Phillips with the Air Toxics and Title III Section.  
12 Cindy.

13 MS. PHILLIPS: If you'll all bear with me for  
14 a second, I'm having a hard time reading the screen  
15 tonight, too. We don't have a regular mouse for this  
16 thing, do we?

17 UNIDENTIFIED SPEAKER: Is it on the A drive?

18 MS. PHILLIPS: I have to pull up Power Point,  
19 though, first.

20 UNIDENTIFIED SPEAKER: (Inaudible).

21 MS. PHILLIPS: You're a genius, Al. Well,  
22 anyway, while this is loading up, my name is Cindy  
23 Phillips, and I'm a professional engineer with the Bureau  
24 of Air Regulation with the Department in Tallahassee, and  
25 specifically, I work in air permitting and deal with

1 hazardous air pollutants. If Al didn't bombard you  
2 enough already with acronyms, I'm going to, you know, use  
3 them again, as well, but I'm going to briefly describe a  
4 federal program that EPA has delegated to the States and  
5 it's case-by-case MACT determinations. And when we're  
6 reviewing permits that have increases of hazardous air  
7 pollutants, we've got this special procedure we're doing  
8 right now. So I just want to sort of give you a little  
9 generic presentation on that and then speak specifically  
10 about the Sea Ray project.

11 One acronym that we use a lot is HAPs. And  
12 what are HAPs? HAPs are defined as hazardous air  
13 pollutants, and EPA came up with a list of 189 in the  
14 Clear Air Act Amendments of 1990, but then they  
15 eliminated one, so there's now 188 hazardous air  
16 pollutants. These are of concern because these  
17 pollutants are known or at least suspected of causing  
18 cancer or other serious health effects, such as  
19 development effects or birth defects.

20 In July of 1992, the USEPA published a list of  
21 source categories that emit these HAPs. Rather than  
22 coming up with limits specifically for each one of these  
23 188 hazardous air pollutants, they decided to look at the  
24 industries that were emitting the majority of these  
25 hazardous air pollutants and then target those industries

1 with regulations and to look at control technology, and  
2 they came up with a new acronym MACT, M-A-C-T, which  
3 stands for Maximum Achievable Control Technology, and by  
4 November of 2,000, EPA is supposed to have developed  
5 standards for all of these source categories. I would  
6 say that I'd be very surprised if they actually meet the  
7 November deadline for all source categories.

8 In particular, EPA has been working on a  
9 standard for the boat manufacturing industry. They're  
10 expecting to propose this new regulation by this coming  
11 February. It typically takes a year from the date of  
12 proposal to the date of the final regulation, so right  
13 there we're probably looking at February of 2001 before  
14 the final regulation comes out for the boat manufacturing  
15 industry. They might be able to get it done by November  
16 2,000, but, again, that depends on the comments that they  
17 receive from the industry and from the public and how  
18 long it takes them to resolve the issues that are brought  
19 up during the comment period.

20 Since this was all envisioned, this whole  
21 process of regulating the hazardous air pollutants was  
22 envisioned in the Clean Air Act Amendments of 1990, and  
23 they realized, Congress, I guess, realized that 10 years  
24 was a long time for all these standards to become final,  
25 and they were concerned about the hazardous air

1 pollutants that might be emitted during that ten-year  
2 period.

3           They also created a program by which we can do  
4 case-by-case MACT determinations for facilities that are  
5 going to be increasing hazardous air pollutants for which  
6 there has not been a federal standard promulgated yet. A  
7 lot of federal standards have already been promulgated  
8 for things like dry cleaners and chrome platers, cement  
9 kilns. So if a permit was coming to the Department right  
10 now, construction permit, we would not do a case-by-case  
11 MACT determination for those types facilities because  
12 there is already the federal standard. But since this  
13 federal standard for the boat manufacturing industries  
14 wouldn't, probably, be around until February of 2001,  
15 that's why we're placed in the position of doing a  
16 case-by-case MACT determination for Sea Ray.

17           When are case-by-case MACT determinations  
18 needed? EPA envisioned that these would be done when  
19 there's a new major source of hazardous air pollutants  
20 when it's constructed or reconstructed, because that's  
21 when it's most cost effective to add new pollution  
22 control equipment. They're not going out and looking at  
23 existing facilities and making them put on control  
24 equipment or adopt new work practices because they feel  
25 it's more cost effective and more logical to do it when

1 people are doing new construction.

2 And what is the MACT limitation? It's, the  
3 MACT limitation is the limitation that's not less  
4 stringent than the emission limit achieved in practice by  
5 the best controlled similar source. So what they  
6 envision is that when you do a MACT determination, to  
7 look around and see what other boat manufacturing  
8 facilities, for instance, around the country are doing,  
9 and those are similar sources. And we're supposed to  
10 pick the one that's controlling it the best and say  
11 that's what MACT does, the same as the best controlled  
12 similar source.

13 In this limitation should achieve the maximum  
14 emissions reduction, but we've also during this process  
15 got to consider the cost of the process, any nonair  
16 quality health and environmental impacts and, also, the  
17 energy requirements. And, of course, since we're  
18 supposed to be looking at similar sources, they did, of  
19 course, attempt to define similar source. And a similar  
20 source means a stationary source or process that had  
21 comparable emissions and is structurally similar in  
22 design and capacity such that the constructed major  
23 source could be controlled using the same control  
24 technology.

25 And since they had another term in terms of

1       construct major source, they had to define that, also,  
2       and at an undeveloped site to construct a major source  
3       means when you fabricate, erect or install a stationary  
4       source or group of stationary sources, like Al had  
5       mentioned before, that it's located within a contiguous  
6       area and under common control, and that it emits or has  
7       the potential to emit 10 tons per year or more of any  
8       hazardous air pollutant or 25 tons per year or more of  
9       any combination of HAPs.

10               So, basically, if a facility was going to be  
11       built and they were only going to be emitting five tons  
12       per year of a single hazardous air pollutant or a  
13       combination, let's say, of 11 tons of your total  
14       hazardous air pollutants, then that would not trigger  
15       this process because EPA is defining a major source of  
16       hazardous air pollutants as a facility that's going to be  
17       emitting 10 tons a year of any particular hazardous air  
18       pollutant, say styrene, for instance, or if they have a  
19       lot of hazardous air pollutants being emitted, that in  
20       the aggregate, all added together, if they exceed, you  
21       know, or equal to the 25 tons per year, then that also  
22       triggers this process. And since Sea Ray is going to be  
23       emitting approximately 150 tons per year of hazardous air  
24       pollutants, then, obviously, it does trigger this  
25       process.



1           And the definition similar for constructed  
2 developed site, it gets a little bit more complicated in  
3 terms of, it's, it's where you fabricate, erect, or  
4 install a new process or production unit that in and of  
5 itself emits or has a potential to emit 10 tons per year  
6 or more of any hazardous air pollutant or the 25 tons per  
7 year or more of any combination of hazardous air  
8 pollutants. So if you had an existing facility that was  
9 major already for hazardous air pollutants, was already  
10 emitting the 10 tons a year or the 25 tons a year  
11 combination of hazardous air pollutants, if they were to  
12 add something that, again, which is a small amount under  
13 the 10 and 25 threshold, it wouldn't necessarily trigger  
14 this process because the new addition itself would have  
15 to be emitting a major amount of hazardous air  
16 pollutants, either 10 tons a year or more of a single  
17 hazardous air pollutant or the 25 tons a year or more of  
18 the combination.

19           And they go on, EPA goes on to define process  
20 or production unit, and that means any collection of  
21 structures and/or equipment that processes, assembles,  
22 applies or otherwise uses material and puts to produce or  
23 store an intermediate or final product in a single  
24 facility may contain more than one process or production  
25 unit.

1           Okay. And then where do case-by-case MACT  
2           determinations fit into the state's air construction  
3           permitting process? Because, again, this is a federal  
4           program that EPA has delegated to us, so we had to fit it  
5           in with our existing state program.

6           I don't know if you all can read that very  
7           well, but, basically, the permitting authority, whichever  
8           office it may be where the permit first comes in -- in  
9           this case the permitting authority was the Central  
10          District Office that they first received the application  
11          to review it. They -- or if it, a permit, comes into  
12          Tallahassee first because it is definitely a PSD and it  
13          comes directly to our office, that, whoever receives the  
14          permit makes the first call, and they do an applicability  
15          determination to look at that construction permit  
16          application and look to see if a MACT determination might  
17          be required because this is a new procedure, and a lot of  
18          applicants aren't even aware of it, and so it's very  
19          important for us to review their application, and if  
20          they've left out these requirements, then we let them  
21          know that their application's incomplete and that they  
22          need to submit additional information. The applicant  
23          themselves are supposed to propose what they think  
24          Maximum Achievable Control Technology is and then we  
25          review what they submit to us.

1           The MACT determinations, regardless of which  
2 office it comes into, whether it's the Central District  
3 Office in Orlando or the Southwest District Office in  
4 Tampa, if it does require a MACT determination, they  
5 route a copy of the application up to my office, and then  
6 the MACT determination that's included, and then my  
7 office is the one that reviews those MACT  
8 determinations. Those are done in Tallahassee for  
9 consistency's sake. And we do require a 30-day public  
10 notice period when the construction permit goes out.  
11 That's required by federal law for case-by-case MACT  
12 determinations.

13           Okay. Like I said, probably by February of  
14 2001 there will be a final federal MACT standard for this  
15 source category, that is, boat manufacturing, so what  
16 happens then? And, in general, once a federal MACT  
17 standard is issued for a source category, the source must  
18 comply with that federal standard by the designated  
19 deadline. Typically, they're given three years to come  
20 to compliance with a new standard. There's some  
21 exceptions to that, but in general they get three years.

22           In the case where you have a major source  
23 that's already regulated under a case-by-case MACT  
24 determination, they may be granted extra time to comply  
25 with that federal MACT standard if the federal MACT

1 standard is more stringent. If the lender of the  
2 extension of time is not specified in the standard, the  
3 air toxic's permitting unit or the permitting authority  
4 may grant extensions up to eight years on a case-by-case  
5 basis. And the rationale is that if we just did a  
6 case-by-case MACT determination where we required a  
7 facility to spend, you know, a lot of money to install  
8 control equipment and then the EPA turned around and came  
9 up with a standard that the control equipment that they  
10 just installed couldn't meet, then they are -- we don't  
11 have to, but we are given the flexibility to grant them  
12 more than the three years to actually come into  
13 compliance, up to the eight years.

14 And if any of you all are concerned about what  
15 the actual regulatory authority is, the detailed federal  
16 regulations can be found in the December 27th, 1996,  
17 Federal Register, and they're also in 40 CFR 63 Series,  
18 also in Subpart B. And we've adopted these into our  
19 State Florida Administrative Code into Rule  
20 62-204.800(10)(d)2. And our program, case-by-case MACT  
21 program, has been effective since July 1st of 1997. And,  
22 also, our Rule 62-210 reflects the 30-day public notice  
23 requirements.

24 So that, in a nutshell, is an overview of what  
25 the case-by-case MACT program is. And, specifically, how

1 it wound up affecting Sea Ray is, like I mentioned, they  
2 were major for HAPs and they were doing this new  
3 construction, so they proposed what they thought Maximum  
4 Achievable Control Technology would be and I reviewed  
5 that, and then I also looked to see where the EPA group,  
6 where they're working on that federal standard, to see  
7 where they are at this point in time. Like I said,  
8 they're getting ready to issue their proposed standard in  
9 February, so they're pretty close to knowing what, I  
10 think -- that seems to change on a pretty frequent basis,  
11 but, by and large, I have a good idea of what they're  
12 going to be proposing, and then look at other facilities  
13 that are out there. EPA did do a survey of boat  
14 manufacturing facilities around the country, and a lot of  
15 their, a lot of the information I used was derived from  
16 their efforts.

17 Our final proposal for the MACT determination  
18 wound up being primarily pollution control -- I mean  
19 pollution prevention as opposed to add on controls,  
20 though we are requiring a pilot project which John  
21 Reynolds is going to speak more about.

22 And pollution prevention, it's where you try  
23 to prevent the HAPs from occurring in the first place.  
24 So the MACT determination, this was, be to limit their  
25 production resins to a 35 percent total HAP content.

1 And, also, as Al mentioned, to use non-atomizing spray  
2 nozzles for the resins, and that would also reduce the  
3 HAPs that are being emitted from the process. For the  
4 base gel coats and pigmented gel coats, there would be a  
5 limit, a maximum average of 33 percent total HAP content  
6 in the gel coats. The clear gel coats, there would be a  
7 48 percent total HAP content limit, and for spray tooling  
8 resins a 30 percent total HAP content. For the  
9 non-atomized tooling resins, 39 percent total HAP  
10 content. Tooling gel coats, 40 percent total HAP content  
11 and also for finishing materials for interior wood parts  
12 such as cabinetry and furniture inside these larger  
13 boats, that they would have to comply with Subpart JJ  
14 which is a federal NESHAP that EPA has finalized that's  
15 for wood furniture manufacturing operations. I felt that  
16 that was a similar enough source where EPA had already  
17 come up with a final standard, and it seemed logical that  
18 if they're going to be doing furniture inside of these  
19 large yachts they should be able to meet the same coating  
20 limitations that is already finalized in that shop for  
21 wood furniture manufacturing.

22 And, likewise, there's already a final  
23 regulation for ship building and ship repair which  
24 addresses surface coating materials used on larger ships,  
25 and I also had included those requirements to be included

1 as part of a MACT as well. And then there's some other  
2 things about cleaning solvents that contain no HAPs, with  
3 the exception if they're going to use a halogenated  
4 solvent cleaner, as long as it complies with another  
5 federal standard that's already been promulgated, then  
6 that would be all right, too.

7 And then, like I said, also as part of the  
8 MACT there is a requirement for add on control equipment  
9 derived from similar sources evaluation as described in  
10 the BACT determination. And with that I'm going to lead  
11 into John Reynolds, who's going to talk about that BACT  
12 determination, so thank you very much.

13 MR. WIDER: Thank you, Cindy. Okay. Next we  
14 have John Reynolds. He is a professional engineer with  
15 the New Source Review Section, and, once again, he'll be  
16 talking about the Best Available Control Technology  
17 determination.

18 MR. REYNOLDS: Like Smith Barney, I do things  
19 the old-fashioned way. I had one of these Power Point  
20 presentations go bad all the time, so I use these  
21 transparencies.

22 If you aren't already dizzy from regulations  
23 and rules and so forth, I think you soon will be. I'd  
24 like to start out by just giving you a little brief  
25 summary of the PSD rules and the fact that this is really

1 a different program than the one that Cindy just talked  
2 about. What PSD is, is basically a program which EPA set  
3 up back in the 1970's to prevent the air quality in  
4 attainment areas from degrading further. And along with  
5 the requirements, the source that is under this rule has  
6 to meet the requirements of Best Available Control  
7 Technology or B-A-C-T. So there are two different sets.  
8 One is M-A-C-T, or MACT, that Cindy just talked about,  
9 and the other is the BACT. Now, the difference in this  
10 case is that the BACT, really, drives the MACT with  
11 respect to the most stringent control technology. Now,  
12 they both apply but it so happens in this particular  
13 case, the BACT is more stringent in terms of the control  
14 technology. Now, we'll explain why that is in just a  
15 minute.

16 As you saw awhile ago, here's what's  
17 happening. Sea Ray is going to build a plant that will  
18 be making large boats. And in the first phase they're  
19 going to be building a lamination building in which they  
20 will be constructing boats, as we understand, in two  
21 sections. They're going to be about 65 feet or 70 feet  
22 long. And what happens is, is the plastic lamination  
23 process is under way, styrene is emitted in the process  
24 of the curing, and we'll get into that and show you  
25 what's actually going to happen.



1           As you see here, the emissions are about 175  
2 tons a year from the lamination. This is really the most  
3 significant area in terms of VOC emissions. And you have  
4 all the other, the assembly, the wood operations and so  
5 forth, but this is really the main one that we're  
6 concerned about.

7           Let's talk a little bit about plastics  
8 manufacturing in general. This, this is really a large  
9 industry, and fiberglass boat building is a significant  
10 segment of it, but there's so many more products and  
11 other types of operations that make up the polyester  
12 resin industry. This is a process that is going to be  
13 used by Sea Ray. As you see, it has these various  
14 steps. You can either construct a boat by hand layup,  
15 spray layup, or you can do it by mechanized systems, such  
16 as we are aware of <sup>at</sup> a plant in Illinois that makes ~~the~~  
17 sport boats. The name of the company is Bombardier, and  
18 I'm sure you've probably heard of I believe it's the  
19 Sea-Doo brand of boat, but it's about an 18-foot sport  
20 boat. Now, they make those on a conveyer type assembly  
21 line, much like an automobile assembly line, but it's a  
22 little different process than what Sea Ray's going to be  
23 doing. And they're doing strictly these two here.

24           Now, these are other means of making plastic  
25 products. This is one process that is being looked at

1 right now as a, as a possible future technology. It is  
2 not sufficiently developed at this point to be used in  
3 this particular case, although, as we understand, there  
4 are a lot of investigators that are looking at this and  
5 there are quite a few patents in recent years dealing  
6 with this type of approach. So that's just to give you a  
7 little bit of a broader perspective.

8 Now, here's a, here's a picture of the Sea Ray  
9 process right here. This is a deck. As you see here,  
10 here's the walls of the deck. I'm sorry. The hull. We  
11 have another one of the deck coming up. And, apparently,  
12 this is one of the half sections here. What happens is  
13 the styrene emissions <sup>come</sup>~~cut~~ off during the process of the  
14 lamination and we, we don't know just how concentrated  
15 they become, but we believe that styrene, being about  
16 four times heavier than air, there is a concentration  
17 gradient such that it may tend to concentrate in the hull  
18 area.

19 We have some other photographs.

20 MR. ROWE: Pardon me, sir.

21 MR. REYNOLDS: Yes.

22 MR. ROWE: That gentleman that was standing  
23 in that hull, whatever you call it.

24 MR. REYNOLDS: Yes.

25 MR. ROWE: Does he have to have on some kind

1 of facial protection in reference to the styrene forms  
2 coming out of there or --

3 MR. REYNOLDS: Okay. Now, please understand,  
4 we have no jurisdiction over the OSHA, the Occupational  
5 Safety and Health issues. See, we're strictly, you know,  
6 dealing with the emissions. Now, the company may want to  
7 address that. As I understand, they have a  
8 representative here later, so they may want to, you know,  
9 talk about that.

10 MR. ROWE: Let me do something here.

11 MR. REYNOLDS: Sure.

12 MR. WIDER: Excuse me, sir. If we could,  
13 could we hold off on the questions until the public  
14 comment?

15 MR. ROWE: No, because that's going to be  
16 gone and my thought is going to be --

17 MR. REYNOLDS: Well, we can bring it back.

18 MR. WIDER: We'll bring it back.

19 MR. REYNOLDS: It should be right here.

20 MR. WIDER: But we'd like to go ahead and  
21 move on to the presentation and go ahead and take the  
22 public comments and questions and take them at that time,  
23 if that's quite all right.

24 MR. ROWE: No, it's not, if you're asking  
25 me.

1                   MR. REYNOLDS: Well, let's -- okay. Go ahead  
2 and ask your question, yeah.

3                   MR. ROWE: Thank you, sir. My concern,  
4 you're standing here telling me that you're not concerned  
5 with the health and the welfare of that gentleman there.

6                   MR. REYNOLDS: Oh, no. No, no. I say we, we  
7 don't have jurisdiction.

8                   MR. ROWE: You don't have jurisdiction?

9                   MR. REYNOLDS: No.

10                  MR. ROWE: But it appears to me, and I'm a  
11 lay person. I barely finished second grade, you know.

12                  MR. REYNOLDS: Yes.

13                  MR. ROWE: But I'm saying that it appears to  
14 me that we all should be interconnected in reference to  
15 the health and the welfare of all of our people,  
16 regardless --

17                  MR. REYNOLDS: Yes.

18                  MR. ROWE: -- of the condition. And for -- I  
19 don't know, it's kind of frustrating and it angers me to  
20 have you stand there and tell me something about styrene  
21 form, and I'm looking at an individual there that doesn't  
22 appear to have any kind of safety protection and you say  
23 that's not your jurisdiction.

24                  MR. REYNOLDS: Well, I'm just telling you I  
25 can't really answer --

1 MR. ROWE: That's okay.

2 MR. REYNOLDS: -- that question --

3 MR. ROWE: I just wanted to voice that  
4 concern.

5 MR. REYNOLDS: -- you know, for the company  
6 because that's really not our purview.

7 MR. ROWE: It should be. It should be all  
8 ours.

9 MR. REYNOLDS: Well, see, the Occupational  
10 Safety and Health Administration -- yes.

11 UNIDENTIFIED PERSON IN AUDIENCE: Excuse me  
12 for interrupting. At this point we haven't even  
13 established whether they are laminating. It looks to me  
14 like they're setting up the mold.

15 MR. ROWE: That's --

16 UNIDENTIFIED PERSON IN AUDIENCE: See right  
17 here?

18 MR. WIDER: Okay. Let's, let's go ahead and  
19 go on with the presentations, if we could, please.

20 MR. REYNOLDS: We can come back to this.

21 MR. WIDER: We'll come back to all this  
22 later.

23 MR. REYNOLDS: I'll put this in a special  
24 place here. All right. This is the deck. And just to  
25 give you some idea of the problem of collecting these

1 emissions, these, these boats are so large that, you  
2 know, it requires a tremendous sized building to move  
3 these things around once they have been assembled and,  
4 you know, are ready to be moved out, and this creates a  
5 difficult air pollution solution because of the fact that  
6 you have a tremendous volume of air with a very low  
7 concentration, which makes it difficult to, to control.  
8 And we will get into more detail about that in just a  
9 minute.

10 Now, in other areas of the lamination building  
11 there will be fabrication of these various parts that go  
12 into the, the production, and as you can see, these  
13 pickup points over here are fairly -- well, I suppose  
14 that one is fairly high compared to some of them, but  
15 you'll see in other pictures. Some of them are down in  
16 this area to pick up floor level emissions. But it's a  
17 very difficult problem to solve and we, we have looked at  
18 a number of different approaches to try to recommend the  
19 best, the best strategy.

20 Now, this shows the, the push ~~sign~~<sup>side</sup>. Now, what  
21 we mean by a push/pull, we introduce air on one side and  
22 we, we pull it out through the other side of the  
23 building, you see, to keep this cross-ventilation going.  
24 And you see this bank of registers here? These are  
25 adjustable where you can, you know, you can direct the

1 flow this way, that way or however you want to try to  
2 keep the emissions at a minimum for the, for the exposure  
3 of the workers.

4 There's another view. You can see their  
5 activities that go on outside of the hull and deck area  
6 that would be picked up by these various duct systems  
7 here.

8 The total volume of air that Sea Ray proposes  
9 to use to ventilate the lamination building, somewhere  
10 around 290,000 CFM. You know, that's what they  
11 originally proposed, and we have done our own  
12 investigation and we believe that that figure can be  
13 reduced somewhat. Now, by reducing it, you improve the  
14 process of controlling the emissions.

15 Now, styrene is just one of many organic  
16 compounds that come off of the process. Styrene gets the  
17 most attention because it is, perhaps, the most  
18 potentially harmful from an occupational standpoint, so  
19 that is why styrene is the one that we're focusing on.  
20 And other emissions come from solvents that evaporate  
21 during the cleanup of the equipment and so forth, so  
22 there are a number of VOC pollutants there, but styrene  
23 is the major one of concern.

24 Now, what is styrene? I mean, people really  
25 don't think about styrene in their day-to-day lives, but

1 it's really one of the major chemicals that we have, and  
2 it's a very important chemical. It is used in  
3 polystyrene which, you know, we all know about the coffee  
4 cups and so forth.

5 The -- I guess back when I was in the industry  
6 20 years ago, styrene production was probably around five  
7 billion tons a -- pounds a year, and now it's probably, I  
8 don't know, about three times that. But it's a  
9 significant chemical. It's one that is needed for us to  
10 maintain the standard of living that we have.

11 Now, the way that styrene is used in the  
12 process of making boats is that it acts as a  
13 cross-linking agent to form a polymer. Now, how many  
14 people took high school chemistry? We got a few here.  
15 You know that, from your, from your high school days,  
16 remember the old benzene ring compounds? And this is  
17 basically what styrene is. It's one of these benzene  
18 rings with -- this is styrene right here. It's a benzene  
19 ring with, with two carbons right there. Now, what  
20 happens is, you see, you have these unsaturated polyester  
21 compounds, and styrene acts as the cross-linking agent.  
22 You see there? It bonds all these together and forms a  
23 very long chain polymer, and Sea Ray can probably expound  
24 on that. Yeah. You see, here is the formula right here,  
25 and as you see, the double bond right there indicates



1 it's a pretty stable chemical.

2 Now, how do we reduce these emissions? Well,  
3 basically, you can either prevent the emissions or you  
4 can install add on controls. Now, the program that Cindy  
5 told you about to reduce the hazardous air pollutants is  
6 basically a prevention program. The BACT requirements  
7 are, as we are proposing, an add on equipment approach.  
8 So that's what -- that's why I said the BACT, in this  
9 case, is the driving force, because it really is a more  
10 stringent requirement because it, it, as we are  
11 proposing, it will require the add on controls.

12 So let's talk about that. There are a lot of  
13 ways to get rid of VOCs. Now, the two that are really of  
14 most significance are these right here. Thermal  
15 incineration. That's burning it with an auxiliary fuel,  
16 and catalytic oxidation. That means through the use of a  
17 catalyst at the right temperature the styrene will  
18 oxidize. And the other process is, really, <sup>d</sup>absorption,  
19 is a very widely used technology, and, as a matter of  
20 fact, in this particular case, as we will talk about in  
21 just a minute, <sup>d</sup>absorption is really a way of increasing  
22 the concentration, in Sea Ray's case, from a very low  
23 level to a higher level in this piece of equipment, and  
24 then the higher concentration can be incinerated. Now,  
25 we'll explain that in just a minute.

1           So what are we trying to do? We're really  
2           trying to oxidize these hydrocarbons. These are the  
3           reactions that are involved. You're trying to get the  
4           hydrocarbon to react with oxygen to yield CO<sub>2</sub> and water.  
5           I mean, it's just that simple. If you don't get complete  
6           combustion, then you get some CO, and then you also get a  
7           little bit of NOx along with it.

8           Now, what do these look like? Here's a  
9           picture of a control device that uses a thermal oxidizer  
10          -- I have a better picture here. It's a little bit  
11          dark. This is really what's taking place. You have a --  
12          within the enclosure of the device, you have two beds  
13          and, basically, what's happening is you're trying to  
14          absorb the VOC in one bed, and then you increase the  
15          temperature of the mix with the burner, you see. You're  
16          using auxiliary fuel. Now, in some cases the  
17          concentration is high enough that you don't need  
18          auxiliary fuel, and in those cases there's, you know,  
19          very little additional cost to operating these. But in  
20          Sea Ray's case that will not be high enough. What Sea  
21          Ray will have to do is they will have to preconcentrate  
22          from about 50 parts per million of VOCs up to about 300,  
23          and then that will be high enough for them to introduce  
24          into this device here.

25                 So what happens is this is called a

1 regenerative thermal oxidizer. RTO is the acronym, and  
2 what it means is these beds are alternatively used until  
3 one becomes -- in other words, after, after you use one  
4 for heating, then it becomes the inlet and you reverse  
5 the cycle back the other way. So it's really a very  
6 simple device. There's nothing magic about it. It's  
7 just using heat to oxidize hydrocarbons. That's really  
8 all, all that's going on.

9 Here's a little cutaway view to show you  
10 actually what the inside looks like. As you can see,  
11 there's the burner and here's the hot bed and there's the  
12 cold bed, and at the end of a cycle, then, this will be  
13 the hot bed and that will be the cold bed. So it's  
14 something that is -- it's been around for a long time.

15 Styrene abatement is really well-established  
16 technology. However, in this particular industry it has  
17 not been applied. Now, why is that? Good question. I  
18 would say that most other industries have had to deal  
19 with their ventilation problems where they have reduced  
20 their air flows enough so that the air stream can be  
21 treated. Now, in a boat plant, that hasn't been done  
22 yet, but we, we are proposing that Sea Ray initiate a  
23 pilot plant project to install one of these devices on a  
24 small scale, test it, determine if it's feasible. If  
25 it's cost effective, then we will require Sea Ray to put

1 on a full scale system. So that is, that is the story in  
2 a nutshell right here.

3 Now, there are other options. One of those  
4 that we permitted not too many years ago is not too far  
5 from here. This is a facility that is controlled by a  
6 catalytic thermal oxidizer, which is a little bit  
7 different than an RTO, but it's -- operates on  
8 essentially the same process of oxidizing the  
9 hydrocarbons. This is operated by Macho Products. I  
10 don't know how many of you know about Macho Products in  
11 Sebastian, but they produce martial arts equipment, and  
12 so they, they have actually installed a system like  
13 this.

14 So, very briefly, what Sea Ray will have to do  
15 under our proposed approach is they will have to prepare  
16 a proposed design which we will have to approve, and what  
17 they will do then is actually install one of these  
18 devices, and it will be up to them which one they go  
19 with. We think that they're probably going to find that  
20 the RTO is the best way to go. There are some  
21 disadvantages from an economics standpoint, but you  
22 actually, you get a higher destruction with the RTO, and  
23 -- well, that's the best we can do with that.

24 Can you see that? Okay. All right. Okay.  
25 We're going to wrap it up with this. But the selection

1 of the control device is really not totally up to Sea Ray  
2 because this is a chart that shows the various regions of  
3 concentration and air volumes. See, here's the air  
4 volume here. And what we're proposing ~~is~~ that Sea Ray  
5 install is <sup>or</sup> 10,000 CFM pilot unit, and the concentration  
6 that they, they have will be kicked up from about 50 ppm  
7 to about 400 ppm with this preconcentrator, and then they  
8 will be in the range that, that you see right here. Now,  
9 the blue line outlines the appropriate ranges for the  
10 RTO. The catalytic unit you see is in this range here,  
11 which is a much higher concentration, so we believe that  
12 Sea Ray is going to be proposing something like this with  
13 an RTO. And whatever they come up with will have to be  
14 approved by us. And, so, with that, we will take your  
15 questions.

16 MR. WIDER: Okay. Thank you. Now into the  
17 meat of our meeting here, public comment and public  
18 comment and questions. Kim, if you can bring the comment  
19 cards up, please. Thank you. Okay. I have, looks like,  
20 five speakers here. And anyone after these five  
21 commentators wants to make a comment, please come up to the  
22 microphone up here, please state your name and your  
23 affiliation, if you would, please, for the court  
24 reporter, and let's get started. I have here Chris  
25 Teaf. I hope I've got this name pronounced right.

1 UNIDENTIFIED SPEAKER IN AUDIENCE: He wanted  
2 to go last.

3 MR. WIDER: He wanted to go last? Oh, my  
4 bad. Sorry. Okay. Johna Holloway.

5 MS. HOLLOWAY: My name is Johna Holloway,  
6 Melbourne Florida. First, I'm not here to speak against  
7 building the plant. I'm not a scientist. All I know and  
8 you know, too, is more and more people are dying of  
9 cancer or going through painful procedures fighting for  
10 their lives because of cancer. Also, my mother-in-law  
11 has Parkinson's disease, a neurological condition. No  
12 one should have to go through the debilitating life that  
13 she leads. And if there's a way and a technology to  
14 prevent pollution that is a possibility of causing  
15 neurological damage, we should put it in place  
16 immediately.

17 I see no reason that one company should earn a  
18 little more money at the risk of Brevard County residents  
19 and risk our lives and the lives of future generations,  
20 either directly or indirectly. Please put the known  
21 technology in place now while the plant is being built  
22 and please put the technology in place as they start  
23 using the plant instead of waiting until these tons of  
24 styrenes go into our air. At 150 tons a year, that's 12  
25 and a half tons a month, and that's incredible to place

1 at our, at our risk. Thank you.

2 MR. WIDER: Thank you very much. I have here  
3 next Clarence Rowe.

4 MR. ROWE: My name is Clarence Rowe. I'm a  
5 citizen, a tax payer of Brevard County. My concern is  
6 the health and the welfare of the citizens of Brevard  
7 County. I notice in reading today's newspaper that there  
8 was some comments that, that you guys have already made  
9 up your mind and that you're going to issue the permit.  
10 I'm just wondering if us being here making our comments  
11 mean anything in reference to your decision of making  
12 that permit. I don't know if the newspaper is correct in  
13 making that mistake -- that statement, but I certainly  
14 would appreciate an answer from you if that is correct.

15 MR. GOORLAND: Mr. Rowe, Scott Goorland for  
16 DEP. Your comments will be taken into consideration in  
17 determining what we do with this permit.

18 MR. ROWE: I know what you're saying, but I'm  
19 saying the newspaper said that you've already made up  
20 your mind and that you will issue the permit.

21 MR. GOORLAND: I'm not sure what the article  
22 completely said. It may have been accurate, it may have  
23 been inaccurate, but we have not issued the permit yet.  
24 We will not until we finish with the comment period and  
25 we address the comments.

1           MR. ROWE:   Well, I just wanted to make that a  
2 matter of record, because I think it's a joke if that is  
3 your desire, to have us to come up here and waste our  
4 time and you're going to do it anyway.

5           The lady before me had a comment in reference  
6 to the health. My comments are always to the health.  
7 That picture that you have up there, I did ask a question  
8 about it. Is that in the lamination or whatever kind of  
9 room that you call it where they put all that stuff on  
10 the boat?

11           MR. REYNOLDS:   Yes, sir, it is. This is the,  
12 the hull lamination, and as you see here, these, these  
13 workers -- it's kind of hard to tell, really, but they  
14 appear to be using the hand layup process here. And what  
15 you're looking at is the front, evidently the front half  
16 of the hull that they're working on. This appears to be  
17 (inaudible). The problem is the exposure that these  
18 gentlemen are carrying in this picture is strictly  
19 regulated by the OSHA standards. We don't -- we really  
20 can't -- we really can't regulate, you know, the  
21 occupational exposure, so, you know, as to the concern  
22 that you had about the lack of respirators, that's really  
23 not our purview and we can't really require that.

24           MR. ROWE:   I understand what you're saying  
25 but it certainly appears that you should have some degree



1 of sensitivity in caring and reporting maybe to OSHA or  
2 whomever else is concerned.

3 MR. REYNOLDS: Yes.

4 MR. ROWE: Because it appears -- I don't  
5 know, it's kind of like turning your back watching  
6 somebody drown when you know that you can save them, and  
7 that is extremely frustrating to me to hear you say what  
8 you stated and at the same time you say this is the  
9 laminating room where all of these --

10 MR. REYNOLDS: Right.

11 MR. ROWE: -- volumes of stuff that's going  
12 around. You kind of remind me of some of these things  
13 they used to deal with -- what do they call it?  
14 Asbestos. One of the hottest things when it came out.  
15 Forty, 50 years later we still got people dying from that  
16 stuff. They're still filing suits. And, I don't know, I  
17 just get really frustrated when I deal with things like  
18 this.

19 Let me do something else here. According to  
20 the handout, I think I saw something in there that Sea  
21 Ray needs to put something together that will capture at  
22 least 53 percent of the styrene or the chemical, whatever  
23 it is. What happened to the other 43 percent?

24 MR. REYNOLDS: Okay. As we, as we mentioned  
25 earlier, this is not really being done by the boat

1 industry as some other industries, you know, have  
2 installed this equipment. So we are proposing that Sea  
3 Ray build a small scale pilot project initially which  
4 would capture a certain percentage of the VOCs, and then  
5 after the feasibility is proven from the pilot  
6 installation, then we would require the full control.

7 MR. ROWE: That would be 90 percent, leaving  
8 a balance of 10 percent?

9 MR. REYNOLDS: Well, you can't, you can't  
10 get, you know, virtually 100 percent.

11 MR. ROWE: My question is just based on some  
12 of the things I was reading on your handout.

13 MR. REYNOLDS: Right.

14 MR. ROWE: The other thing is a very serious  
15 concern of mine. Sea Ray has a site plan and you are  
16 reviewing that site plan for necessary approval of an air  
17 construction permit. However, Sea Ray has already took  
18 undeveloped land, cleaned it and hence to start building  
19 facilities.

20 MR. WIDER: Yeah. That is a zoning issue.

21 MR. ROWE: No, that's not a zoning issue.  
22 That is part of your responsibility.

23 MR. WIDER: Oh, Len is supposed to address  
24 that. I'm sorry. Would you care to take the mike,  
25 please.

1                   MR. KOZLOV:   Mr. Rowe, what had happened is  
2                   that the agency found Sea Ray having this facility under  
3                   construction.   This was -- and what had happened, I  
4                   contacted the consulting engineer in Melbourne, Mr.  
5                   Cannelou, and I said, look, we have your application  
6                   in-house, and -- with the Department, and you shouldn't  
7                   be building anything out there, and he says, I didn't  
8                   know that.   So, anyway, I said, well, the fact is now you  
9                   do know it, regardless of whatever it was, he said he  
10                  didn't know it, and I said, well, you know, you just  
11                  can't go ahead and continue to do this.

12                  So, anyway, he went back, he discussed this  
13                  issue with his client.   He came back to me and he said,  
14                  look, we're just building an office building and we're  
15                  building a warehouse.   So I went ahead and I agreed and I  
16                  said, all right, that's all you build, because there are  
17                  no emission units, there's no pollution, there's nothing  
18                  that effects the, the emissions or anything else of the  
19                  facility by building a warehouse and building an office  
20                  building, and that's it.   So I went ahead and said, okay,  
21                  and that's it.   And they went ahead and sent me a letter  
22                  confirming the conversation, and that's how it came  
23                  about.

24                  MR. ROWE:    I can tell you up front I did file  
25                  a complaint in reference to that very given subject.   But

1 I'm having -- if you're the gentleman that sent me a copy  
2 of their letter dated sometime in June where they made  
3 the request to build, you certainly didn't send me your  
4 response, and I have been calling your office and other  
5 office of the Environmental Protection -- I mean  
6 Environmental, yeah, Protection, to request some kind of  
7 documentation other than your word, because I think that  
8 there's some responsibility if you have an application in  
9 for a construction permit. There should be some kind of  
10 track record, documentation to follow what -- who gets --  
11 what authority do you have? By what law, rules or  
12 regulation do you give this authority? Because that's  
13 like building a gun, making a gun and you say it's not a  
14 weapon because it doesn't have a trigger. Anybody can  
15 make something and make it a trigger and then it becomes  
16 a weapon. So and as far as I'm concerned, and it's my  
17 personal opinion, you jump started them already, and I  
18 would hate to see that pattern started here in Brevard  
19 County where everybody that comes in here start building  
20 prior to getting their permit approval. And that's part  
21 of my argument.

22 MR. KOZLOV: We did not issue a building  
23 permit. The building permit is a separate issue that is  
24 issued and the site plan of building anything in this  
25 county is issued by Brevard County. The DEP has

1 absolutely no linkage, no relationship to that issue.  
2 The only thing we issue is a, initially a construction  
3 permit in reference to the emissions and to the facility  
4 that's going to go ahead and provide emission units and  
5 air pollution or control thereof in this situation.

6 MR. ROWE: Sir, could you give me anything  
7 that authorizes you to give them the permission to  
8 build? I don't care what it is.

9 MR. KOZLOV: I went ahead and I told them.  
10 I'm telling you what I'm just telling you right now. I  
11 said, go ahead and just complete that construction that  
12 you already started because it had absolutely no, no  
13 emission units, it's strictly an office building and it's  
14 strictly a warehouse. And that's all they told me it  
15 was, and that was it. And the only correspondence that  
16 occurred on this issue was my verbal communications with  
17 Mr. Cannelou and then a letter that came back from Sea  
18 Ray, which I think I sent you a copy of --

19 MR. ROWE: That letter was before.

20 MR. KOZLOV: -- which confirmed the  
21 conversation, and that's all there is.

22 MR. ROWE: I thank you for that, but I just  
23 recently got a decision in reference to a judge that  
24 outlined all of the -- these people don't even have a  
25 permit from your office yet.

1 MR. KOZLOV: That's correct.

2 MR. ROWE: And when the judge issued the  
3 decision, he specifically outlined the administrative  
4 building and all those other things that's a part of that  
5 site plan. And I don't know how you can go beyond your  
6 authority in telling somebody to jump start something  
7 when you have to look at the overall site plan because  
8 it's all a part -- all of it is a puzzle that goes  
9 together, and you can't build one without having the  
10 other. I mean, yes, you can build a restroom, but it's  
11 still a part of it. It's part of what the employees need  
12 to work with. I'm through with that.

13 I still would like to have something, since  
14 everybody is here, in reference to the authority  
15 documentation that was given to Sea Ray to build. The  
16 gentleman just stated that it appears that he doesn't  
17 even know what it looked like. He doesn't even know if  
18 they are still building or discontinued, and I find that  
19 extremely insulting. So I would certainly like to have  
20 something from your office pointing out the regulation,  
21 rules or authority that gives anybody the authorization  
22 for a -- to start building when you have an application  
23 in for construction.

24 Let me do something else here. Does any of  
25 you have any idea when the last time we had bad air in

1 Brevard County without the different expansions and the  
2 other plants coming in here? Do any of you, any of you,  
3 have any idea when the last time Brevard County was given  
4 a health warning? You see what I'm talking about?  
5 September the 3rd, 1999. And if you go back and look at  
6 it, there's been numerous of other occasions in Brevard  
7 County where Environmental Protection has issued health  
8 warnings. I'll start with August the 27th, 1998; August  
9 the 26th, 1998; June the 30th, 1998; May the 22nd, 1998;  
10 May the 2nd, 1998, and, as I previously stated, September  
11 the 3rd, 1999.

12 I don't know. Have you guys ever turned  
13 anybody down for air construction permit, or is it just  
14 business as usual? I'm serious.

15 MR. WIDER: Does anybody know that?

16 MR. LINERO: We've, we've issued denials.

17 MR. ROWE: I'd like to, I'd like to have a  
18 list of them because this, you know, to read the paper  
19 where you're going to do something prior to people, these  
20 people that live here that has to live with that  
21 particular thing, to me -- and you're up in Tallahassee.  
22 I got a guy over in Orlando, he done already admit it.  
23 He doesn't even know what's going on, but he gives his  
24 verbal approval. I'm having some serious problems. And  
25 as I previously stated, that's part of the site plan.

1 Any building that you build -- I have a copy of the site  
2 plan. And, by the way, can anybody tell me what building  
3 of the site plan for Sea Ray is the illuminating  
4 building? What building is that?

5 MR. REYNOLDS: We had, we had a transparency  
6 up here.

7 MR. ROWE: Could you tell me, please?

8 MR. LINERO: 102.

9 MR. ROWE: 102?

10 MR. LINERO: Is lamination assembly. And  
11 then 201 will take part of lamination assembly and that  
12 will be separated. The building that has been  
13 constructed, at least from -- to the untrained eye,  
14 looking at it is 101, the warehouse and office building.

15 MR. ROWE: I think I asked the question the  
16 authority that the gentleman had to give that approval,  
17 and I'm hoping I can get that information.

18 Right now you're saying the only building that  
19 has been built is the -- yeah, I was wondering what that  
20 was when you put it up and took it back down. Where is  
21 Building 201, the laminating building? That's 201? And  
22 the other one -- I can't see it, so I have to take your  
23 word for it.

24 MR. REYNOLDS: That's 201 there.

25 MR. ROWE: Okay. That's 201, and the other



1 one was what?

2 MR. REYNOLDS: This is 101.

3 MR. ROWE: 101. Is that part of the  
4 laminating?

5 MR. REYNOLDS: Yes.

6 MR. ROWE: Okay. And the other buildings?

7 MR. REYNOLDS: These are --

8 MR. ROWE: No. Could you -- yeah. What is  
9 that?

10 MR. REYNOLDS: 301. This is a warehouse.

11 MR. ROWE: No, no. What is 301 one, please?

12 MR. WIDER: It didn't say.

13 MR. ROWE: What was that?

14 MR. WIDER: It didn't say on the map. It  
15 doesn't say specifically what the building is.

16 MR. ROWE: I'm asking the question because I  
17 have a copy of the site plan and it appears to me if  
18 you're going to do something you should know what they  
19 are, too, and maybe I'm wrong in thinking that way, but  
20 it appears to me if you're going to give us a  
21 presentation and put stuff up on the wall there, it  
22 appears to me that you should know what it is. And maybe  
23 I'm wrong in thinking like that. That's okay. If you  
24 can't tell me, that's okay.

25 MR. LINERO: No, no. I think -- let us, let

1 us have a chance here. We -- I think when I started out  
2 I described the buildings, and I certainly described the  
3 building, Building 101, 101 which it's hard to see it but  
4 it's upper left.

5 MR. ROWE: Okay. That's part of the  
6 illuminating, ill -- whatever it is.

7 MR. LINERO: Lamination.

8 MR. ROWE: Right. Okay.

9 MR. LINERO: You know, I was there today. I  
10 didn't see evidence of any structure going up.

11 MS. PHILLIPS: This is the structure that --

12 MR. LINERO: The structure that going up,  
13 102, is described as 48,000 square foot building and  
14 additions, including a 20,000 square foot fabrication  
15 area and 22,900 square feet of support area such as wood  
16 shop.

17 MR. ROWE: Hold it. Fabrication. Would that  
18 be somewhere where they would use to mold and spray that  
19 stuff?

20 MR. LINERO: No, no.

21 MR. ROWE: Prepared or --

22 MR. LINERO: Fabrication of wooden parts,  
23 possibly cutting materials, things like that.

24 MR. ROWE: Okay.

25 MR. LINERO: But it's not the lamination

1 assembly area.

2 MR. ROWE: That's building what?

3 MR. LINERO: That's Building 102.

4 MR. ROWE: 102.

5 MR. LINERO: To the untrained eye, it looks  
6 complete.

7 MR. ROWE: And where's the warehouse?

8 MR. LINERO: That includes -- that is the  
9 warehouse. It -- yeah, that's the warehouse.

10 MR. ROWE: Okay. Where's the administrative  
11 building?

12 MR. LINERO: The administrative building is  
13 that structure out in front of it.

14 MR. ROWE: Okay. Thank you. Well, I'm going  
15 to stop hogging the floor.

16 MR. LINERO: We don't mind.

17 MR. ROWE: And let somebody else speak. But  
18 I, I'd certainly appreciate getting some answers to my  
19 questions or the documents related to them, because I  
20 think you ought to know what you're doing and be able to  
21 give documentation in reference to your decisions. Thank  
22 you.

23 MR. WIDER: Thank you, Mr. Rowe. My next  
24 comment is from Sam Yunis. You can come to the  
25 microphone, please.

1                   MR. YUNIS:    Thank you.  I'm Sam Yunis from  
2   Merritt Island.  Actually, I live right across State  
3   Route 528 from this plant, maybe a quarter mile from the  
4   building that's going up right now.  I guess, I guess I  
5   agree with everybody that's spoken before me.  In fact,  
6   you guys as well.  This is really about, you know,  
7   quality of life.  And for me, that means more than  
8   health.  That also refers to the smell that's generated  
9   by styrene.

10                   And I've seen some of the EPA reports, and  
11   just tossing out some numbers, the health, health  
12   threshold is about 230 parts per billion for styrene on a  
13   continuous basis, and the smell is a mere eight parts per  
14   billion, which is pretty small.

15                   I can't claim to be an expert at this, but I  
16   ran a couple dispersion models for the emission rate out  
17   of this plant and I came up with anywhere between 16 and  
18   6,000 parts per billion depending how you calculate it.  
19   I mean, I'd challenge anybody to change those numbers.  I  
20   don't know what the right number is, but I get 16 to  
21   6,000 parts per billion, and the smell threshold is  
22   eight.  So I think we got an impact on the community, and  
23   this is about 200 yards away from the plant right across  
24   State Route 528 where there are houses.

25                   Okay.  I also have data points from guys I

1 work with who live across the Indian River from the State  
2 Route 3 plant and say on a bad day they can smell that  
3 plant, so there's definitely range to this styrene  
4 smell.

5 So with that in mind, I guess I come here with  
6 a number one goal of trying to get this permit denied,  
7 and I have several reasons for that, and I'll just  
8 enumerate those now. There's no other industry even  
9 close to this on Merritt Island. You guys noted that as  
10 well in your statement where you called this one plant.  
11 South of Cape -- or Kennedy Space Center, all the way to  
12 520, as far as I know, this is the only heavy industry in  
13 the area. It's basically a residential area or it's  
14 swamp.

15 Probably not an issue for you guys, but this  
16 is an eyesore in what I consider a beautiful area, and I  
17 think it affects the quality of life for many people.  
18 You guys were showing a map, things like Yahoo or  
19 Mapquest, or whatever, but it didn't show the closest  
20 development to that, so I guess I brought you a picture,  
21 which you may already have, of this area that shows right  
22 across from where Sea Ray has cleared land here in this  
23 forest. Here's an existing development right here,  
24 right across the street.

25 MR. WIDER: If you could turn around and show

1 the audience as well, I'd appreciate that.

2 MR. YUNIS: You guys want this?

3 MR. WIDER: Sure. Just drop it off, if you  
4 want to submit it.

5 MR. GOORLAND: Put your name on it.

6 MR. YUNIS: Okay. I estimate there's about  
7 300 homes within a quarter miles of this plant right off  
8 your page here, and probably, I don't know, within a mile  
9 of this, 1,000 homes. So I guess the point I'm trying to  
10 make is all of these homes are also south of this road  
11 right here, 528. And if you notice, in the winter around  
12 here, and I can get the statistics, I have them, but the  
13 wind is prevailingly northerly which means all winter  
14 long the smell is going to be driven directly towards  
15 this community.

16 I did, I did read all the MACT and BACT stuff  
17 you all proposed. I tried to understand as much of it as  
18 I could. It's difficult, but I guess in spite of that --  
19 and I respect everything you guys did. I mean, I think  
20 it's great. 85 percent of emission control would be  
21 fantastic. However, still, if I multiply my, you know,  
22 the numbers I came up with by 15 percent, which is what's  
23 going to get out, we're still going to be in the odor  
24 range and maybe the health range, I don't know, depending  
25 on how the wind blows. So I think, I think there is a

1 problem there.

2 In spite of that recommendation, in fact, for  
3 all that control, I still think there's a problem in that  
4 I don't think the Sea Ray Corporation understands the  
5 problem or they've proven to be a good neighbor, and  
6 that's been evidenced by their requests to you guys in  
7 their documentation saying they're one plant, they don't  
8 need to incorporate this technology, and they don't want  
9 to. So I think -- and then there's been some statements  
10 by Sea Ray executives at various board meetings and such  
11 where they say it's not a carcinogen, it's not going to  
12 be detected in the area neighborhoods when people all  
13 over Merritt Island can smell the Merritt Island facility  
14 already. So I think there's, there's not necessarily  
15 good neighborhood will on their part.

16 Let's see. I guess, sort of one last point  
17 along this line of, of the technology or the control  
18 technology not being necessarily a good idea to, to  
19 permit on that basis is that I'm an engineer, too, and I  
20 know that one of the worst things for an engineer is you  
21 have a great plan, but people get in the way, and  
22 especially when people aren't in favor of what you've got  
23 planned. They tend, the best models tend to go astray  
24 that way, and I guess I have no faith in the BACT and the  
25 MACT that will achieve the goals if Sea Ray doesn't want

1 it to achieve the goals. And it's certainly in their  
2 best interest because it costs money.

3 So I guess in conclusion, then, on what I  
4 wanted to say is I think this is an inappropriate plant  
5 for this area with this, of this type and this magnitude  
6 to be located right there. Okay. That was the end of  
7 what I had to say. I have some questions, though.

8 MR. WIDER: Very well.

9 MR. YUNIS I guess, what are the grounds to  
10 deny this permit? You know, I spoke for a long time  
11 here, but what would I have to say to deny this permit,  
12 to get this permit denied?

13 MR. WIDER: Does anyone want to handle that?

14 MR. LINERO: I guess that, that they would  
15 not be complying with the Department's, rules and  
16 regulations. In other words, if, if we were not  
17 permitting this thing in accordance with the Department's  
18 rules and regulations, then that would be a grounds for  
19 denial, or if they didn't provide reasonable assurance  
20 that they're going to meet the Department's rules and  
21 regulations before getting that final permit, I, I  
22 believe, and I'm not, you know, I'm not an attorney and  
23 so forth, but I believe that's grounds for denial.

24 Really, if people meet the rules, you know, if  
25 people propose a project, propose an application, and



1 what's in that application fills all the requirements and  
2 they're able to show that they won't cause or, you know,  
3 cause or contribute to an exceedance of an ambient air  
4 quality standard, they're able to show that, then we,  
5 then, we, you know, and we issue the permit, and the  
6 other part of it is they have to install the Best  
7 Available Control Technology and provide reasonable  
8 assurance before we issue that permit that they will  
9 install that technology. And if not, then I, then I  
10 believe those are grounds for denial. So we're working  
11 with them to establish that they will comply with the,  
12 with our Best Available Control Technology determinations  
13 ahead of, ahead of issuing the permit.

14 One of the things that I have to tell you is  
15 that it did take awhile for us to establish all the rules  
16 that are applicable to this project. Initially, the  
17 application was submitted without a MACT application,  
18 okay. We alerted them to that. They, they fulfilled the  
19 requirement as far as, as far as providing us with a  
20 proposal for MACT.

21 The second hurdle was we determined, and they,  
22 they probably didn't have -- you know, they probably  
23 weren't certain that this is one facility. That's  
24 debatable whether something a mile away is part of your  
25 facility, but we made that decision. They are, they

1       reserve the right to dispute that decision, so we don't  
2       know. We don't know for a fact that they will install  
3       the Best Available Control Technology because they could  
4       exercise their right to challenge the decision that we  
5       made that their -- the PSD applies. And if they  
6       challenge that, then the add on control equipment is a  
7       little more difficult to require. But if, I mean, if  
8       we're certain that PSD applies and that BACT is required  
9       and that MACT is required and we don't get an update of  
10      the application to reflect what they're really going to  
11      do -- because this is the man here who decided what needs  
12      to be done. It wasn't proposed. There was no control  
13      equipment proposed. However, pollution prevention  
14      measures were proposed, and those are quite proper. So  
15      we would be -- we need to get the reasonable assurance  
16      from their engineers and their company that they will  
17      install this equipment. But as I said, as we sit here  
18      today, they reserve the right to challenge whether these  
19      facilities are near each other and that PSD applies. So  
20      I think, I think, basically, you've got the general,  
21      you've got the general idea.

22                    Another thing, of course, is that someone can  
23      petition, and I believe the time has passed for the  
24      petition and an administrative law judge can order a  
25      denial of the permit. That's, that's another way that it

1 can be denied, but we do have the authority to deny the  
2 permit, and one basis for denial is lack of reasonable  
3 assurance that they will comply with the Department's  
4 rules and technology requirements and so forth.

5 MR. YUNIS: Okay. I understood that last  
6 statement. That was clear.

7 MR. LINERO: Thank you.

8 MR. YUNIS: Okay. Well, I guess, how do you  
9 determine that compliance? What does this department do  
10 to determine their compliance with your recommendations?

11 MR. LINERO: In the, in the intent package,  
12 I, I don't know if we included the cover letter, but we  
13 certainly did include that technical evaluation and, like  
14 I said, you can look through it. They have to provide  
15 reasonable assurance, they have to provide affirmative  
16 reasonable assurance in the form of a plan design and so  
17 forth submitted to us that will provide the reasonable  
18 assurance that they will meet, meet the level of  
19 technology and the emission limits that we put in the  
20 draft permit.

21 So beyond that, later on they have to provide  
22 further details regarding the exact nature of the pilot  
23 plant that we would like them to install.

24 MR. YUNIS: I guess that's not really the  
25 question I was asking.

1 MR. LINERO: Yes.

2 MR. YUNIS: I'm asking more who will monitor  
3 and make sure that Sea Ray uses the technology  
4 correctly? In other words, has these, has these, has  
5 this concentrator going and is collecting all the styrene  
6 while the bay doors are wide open in the facility.

7 MR. LINERO: Yeah. I, I appreciate your  
8 question. We haven't, we haven't reached that point  
9 yet. We haven't reached that point yet in our  
10 negotiations with them. We would appreciate any comments  
11 that you have as far as measures that ought to be  
12 incorporated in that plan. These are the kinds of things  
13 we can get from this public meeting. If you have, you  
14 know, your recommendations, you said you're an engineer,  
15 we're allowed to look to any, to any competent person and  
16 ask for their comments. We invite, we invite yours. You  
17 can e-mail them to us. We're probably the ones that will  
18 make the decision on that, but we have to negotiate them,  
19 you know, with Sea Ray and, and, you know, I appreciate  
20 your concern and I understand exactly what you're  
21 saying.

22 If somebody doesn't want something to work,  
23 someone could, you know, make it not work. I, I think  
24 there's good faith here, and I believe that if they  
25 install this system that, you know, with the investment

1 that it entails, I believe they'll want it to work. I  
2 would want it to work.

3 MR. REYNOLDS: Let me just add a comment  
4 here. We will review what Sea Ray submits and we'll  
5 either approve it or deny it. If we do not approve it,  
6 then we will tell Sea Ray what they have to do to make it  
7 approveable.

8 MR. YUNIS: I guess just reiterate my  
9 question, I'm not more concerned with not, not that the  
10 plan is bad, because I've read the plan and understand  
11 it. I'm worried about the implementation and how that's  
12 monitored. And I don't, I don't know exactly how the Sea  
13 Ray facility works at Merritt Island, but I drive by it  
14 every day, and when I drive by it the smell is very  
15 strong, all the bay doors are wide open. So you can  
16 install whatever you want, but I wonder how  
17 implementation is going to be monitored.

18 MS. PHILLIPS: It is in the Central  
19 District's jurisdiction and they're the compliance  
20 office. So if you have any complaints, for instance,  
21 about objectionable odors which are prohibited in the  
22 permit, then you would call the Central District Office  
23 and one of their compliance inspectors would go over to  
24 investigate it.

25 MR. YUNIS: Just for my clarification,

1 prohibitive -- what was that? Odors are prohibitive in  
2 the --

3 MS. PHILLIPS: Objectionable odors.

4 MR. KOZLOV: It's objectionable. It's stated  
5 as objectionable.

6 MS. PHILLIPS: Objectionable odors.

7 MR. KOZLOV: It's not prohibitive, it's  
8 objectional, because everybody has a different level or  
9 threshold of what an odor is, and it's a very subjective  
10 issue.

11 MS. PHILLIPS: Right. But that is a  
12 condition in the permit, Len.

13 MR. KOZLOV: I'm sorry?

14 MS. PHILLIPS: Yes, but that is a condition in  
15 the proposed permit.

16 MR. KOZLOV: It's a condition, it's a rule,  
17 but the rule says objectionable odors, and, therefore, we  
18 will investigate it, yes.

19 MS. PHILLIPS: Right, right. It's your  
20 office. He was asking what was the mechanism for that,  
21 and it's the Central District Office.

22 MR. YUNIS: Okay. Can you state again how we  
23 contacts you or who you are?

24 MR. KOZLOV: Our number is 894-

25 UNIDENTIFIED SPEAKER: 7555.

1 MR. KOZLOV: 7555.

2 MR. YUNIS: And you represent which office?

3 MR. KOZLOV: Central District of Orlando.

4 MR. YUNIS: Of what, DEP?

5 MR. KOZLOV: Yes.

6 MR. YUNIS: Okay. A couple more. What --  
7 could you talk about what the MACT or BACT is on the  
8 current facility versus what you're proposing to get a  
9 feel for what the impact might be on our community prior  
10 to all this, you know, actually going into  
11 operation?

12 MR. LINERO: The present facility doesn't  
13 have a BACT. Okay. The present -- am I right? The  
14 existing facility, I think it was built in '88, or  
15 something like that, and the initial, the initial --  
16 initially was permitted at less than 250 tons per year of  
17 VOC, and that didn't require a BACT determination. A  
18 subsequent expansion of less than 250 tons also didn't  
19 require a BACT determination.

20 Now, this facility down the street was going  
21 to be less than 250 tons per year, so that almost didn't  
22 require a BACT determination, but after lumping them  
23 together, there are rules that kick in and say if you  
24 increase emissions by more than 40 tons on something  
25 that's already emitting more than 250, then the addition

1 requires a BACT determination. So what they have there  
2 now doesn't have a BACT determination, however, they're  
3 proud of the fact that they believe that they've  
4 instituted procedures there, pollution prevention  
5 procedures, to, you know, to minimize the emissions by  
6 using relatively low styrenes in their resins and so  
7 forth. So they would probably, they would say that  
8 they've instituted some things there.

9 Without the control requirement that we're  
10 talking about here in the new project, it's, it's a  
11 little better than the plant that already exists. I  
12 think in the new plant they'll be using more  
13 non-atomizing techniques, that is more hand lay. But, by  
14 and large, you know, it will be roughly, roughly about  
15 the same level of control. But with the control  
16 equipment it will be, you know, it will certainly be  
17 superior to plants they have now.

18 MR. YUNIS: Okay. You mentioned there was,  
19 you know, obviously the most cost effective to include  
20 the add on technology at the time of construction. I  
21 guess I don't remember who said that. It think that was  
22 said over here. But with, you know, given all I said  
23 about the houses in the area and that, I guess I'd like  
24 to encourage you all to recommend that that technology,  
25 you know, be expanded beyond a pilot program or go to an



1 accelerated pilot program, if possible, to go from the 50  
2 percent to the 85 percent. I think, I think the  
3 neighborhood's going to need that. Although, although, I  
4 have to admit I still hope you deny this permit.

5 I have one last question. I guess maybe two  
6 last questions. One, there are days -- I think it was  
7 mentioned before -- that the EPA, you know, where the  
8 air quality steps above a threshold and the EPA steps in.  
9 Does this plant contribute in any way to making, turning  
10 Brevard County into, you know, turning on more days like  
11 that in Brevard County which could lead to, I guess, more  
12 corrective action here on our part, like emissions  
13 control and all that kind of thing?

14 MR. LINERO: Not -- okay. Not so much to  
15 what you've described. What you described is ozone  
16 nonattainment. And this plant, its VOCs will contribute  
17 some, but it's, it's a very, it's really a very minuscule  
18 contribution compared to the effects that you would get  
19 from the nitrogen oxide emissions from the power plants  
20 and the nitrogen oxides and the VOCs emitted by the  
21 automobiles. It will have its small contribution, but  
22 it's -- we believe that it won't cause or contribute to a  
23 violation of a national ambient standard or increment.

24 MR. YUNIS: Okay. One last question related  
25 to your comment here. If, if we decide -- if the plant

1 goes into operation and the odor becomes objectionable,  
2 say, and we contact their office, what, what takes effect  
3 at that point? Are we talking about shutting the plant  
4 down or, or what?

5 MR. KOZLOV: No. No, you wouldn't shut the  
6 plant down. The only way you can do that is a court  
7 order, and only a judge can do that. What would happen,  
8 people would come out first to investigate the complaint  
9 and see if, indeed, there is an objectionable odor. And  
10 then if, indeed, there is, of course, you have to work  
11 with the plant to go ahead and do something, take some  
12 steps and negotiate with them, if you will, to what they  
13 can do to eliminate or reduce those odors, whatever  
14 measures need to be taken. First you come out and check  
15 this out and go from there and deal with the facility, go  
16 from there to get rid of these things.

17 MR. YUNIS: Okay. Thank you. Well, I guess  
18 my final comment is, then, based on that answer, I  
19 certainly hope you don't allow this. Thank you.

20 MR. WIDER: Thank you Mr. Yunis. I have  
21 another comment here from Douglas Sphar.

22 MR. SPHAR: Yes. I'm Douglas Sphar, Cocoa  
23 Florida, and tonight I'm representing the Sierra Club  
24 Turtle Coast Group. The Sierra Club is not against the  
25 Sea Ray expanding their production facility, but the

1 Sierra Club is concerned about Sea Ray significantly  
2 increasing it's emission of volatile organic compounds  
3 and hazardous air pollutants, in particular, styrene, and  
4 EPA designated hazardous air pollutant, as mentioned here  
5 earlier.

6 And, also, in this permitting document the DEP  
7 states that the International Agency for Research of  
8 Cancer has determined that styrene is possibly a  
9 carcinogen and the EPA, I believe, has this investigation  
10 under way right now, will make an official determination  
11 one way or the other next year. The DEP and technical  
12 evaluation and preliminary determination states, that in  
13 view of the applicant's combined emissions exceeding 600  
14 tons per year of VOC, HAP and styrene status as both a  
15 HAP and possible carcinogen, it is reasonable and  
16 justifiable that the applicant should be required to  
17 install add on control system. As we heard here tonight,  
18 I think the other gentleman, that process has to be given  
19 priority.

20 The Sierra Club has several concerns about  
21 this permitting action. One of them was the perception  
22 that construction was under way in advance of the  
23 permit. We've heard Mr. Kozlov said that's not true, but  
24 when they do get around to constructing the lamination  
25 building, the ventilation facility is a key factor in

1       styrene emission control, and the ventilation system may  
2       be difficult to modify or add on controls put in once the  
3       building is constructed. And so we would hope that the  
4       DEP is intimately involved in the design and layout of  
5       that facility so that it will facilitate the  
6       implementation add on. We'd hate to hear, you know, a  
7       bean counter type argument that, you know, the building's  
8       built and it's going to cost too much to put equipment  
9       in, you know, and have the entire production shot down  
10      right off the bat.

11               Sea Ray seems to be implementing, as you  
12      mentioned earlier, a high volume, low concentration  
13      ventilation system, and according to the EPA reports,  
14      this type system is really not amenable to low cost add  
15      on emission controls. As part of the facility design,  
16      the DEP should be requiring Sea Ray to incorporate  
17      innovative air flow management practices that will  
18      provide protection to the workers, as well as greatly  
19      reduce the air volume exhausted to the outside and  
20      increase concentration discharge air. And as we all  
21      know, this reduced flow, high concentration discharge  
22      will increase the cost of activity of these add on  
23      treatments.

24               Sierra Club's second concern is the time line  
25      for the demonstration program. This new facility will be

1 up and they'll be laminating boats for over a year and a  
2 half before the styrene production equipment is even  
3 installed. And as the gentleman mentioned earlier, the  
4 DEP should make these -- the permitting and the startup  
5 of the facility and the installation of the pilot project  
6 be contemporaneous. The styrene emission should be in  
7 when the first hull is laminated.

8 Sierra Club's first concern -- or third  
9 concern is with the cost analysis that is part of the  
10 pilot scale system evaluation. Sierra noticed that  
11 there's often a large disparity between the agency's cost  
12 estimates for a unit mass removal of a pollutant and the  
13 applicant's estimate. The DEP should require cost data  
14 for pilot scale system to be collected and organized in a  
15 manner that provides easy audit and verification by an  
16 independent third party. This is critical if the  
17 applicant contends that the full scale system is not  
18 going to be cost effective. We'd hate to get through the  
19 pilot program and, again, have the bean counters shoot us  
20 down because they say it's going to hit their bottom line  
21 too hard to go to a full scale system.

22 The open mold fiberglass boat building  
23 industry seems to be singing the lament about the cost of  
24 add on emission control equipment. This lament is  
25 reminiscent of the auto industries in the 1970s when they

1 claimed that they could not put emission controls on cars  
2 and make a profit. Well, 30 years later the auto  
3 industry is thriving and we have these controls on them.  
4 And, again, the EPA in their report assessment of styrene  
5 emission controls for FRP/C and boat building industry  
6 states that these add on styrene emission controls are  
7 not generally employed because nobody has got around to  
8 mandating them. And, again, we're urging DEP to be  
9 aggressive in mandating these add on controls be put in  
10 this facility. And we'd like to explore ways -- I don't  
11 know how -- might involve the county government -- to  
12 retrofit the existing plant to start pulling down that  
13 426 tons of VOC that that facility is permitted.

14 Because Sea Ray is the leader in the  
15 fiberglass boat industry, and, as such, the DEP should  
16 challenge them to be the leader in the styrene removal  
17 technology. Thank you.

18 MR. WIDER: Thank you, Mr. Sphar. I've had  
19 two requests for permission to speak last, and I'm going  
20 to --

21 MS. TOBER: I got another one.

22 MR. WIDER: You've got another one? I'm  
23 willing to take anybody's other questions right now that  
24 have any, if you would like to come to the mike and state  
25 your name and speak. Sir, if you want to go ahead and go

1 first.

2 MR. WREN: My name is Richard Wren. I'm a  
3 managing agent for two associations of approximately 300  
4 units in total across the street from Sea Ray, and I deal  
5 with various situations around properties and  
6 developments and permits for different builders in  
7 Brevard County at the same time. And I live in Melbourne  
8 Beach. I've been here 15 years. I want this to be my  
9 home for my family for the rest of our lives, and I see  
10 three or four things here that are very bothersome to  
11 me.

12 On the site plan I see a water facility  
13 retention pond right next to the Indian River in the  
14 right-hand corner. I find that a serious problem. The  
15 reason I find that such a serious problem is if I built a  
16 water retention pond and build properties around that  
17 retention pond, I'm required to control that water until  
18 it's absolutely purely clean before I can even let it run  
19 off into St. John Water Management. How can a plant that  
20 emits styrene not contaminate the water in the St. John  
21 Water Management district? Have you addressed that?

22 The third area of concern to me is you have a  
23 vertical building three, maybe four stories high,  
24 allowing these half hulls to be manufactured. When you  
25 manufacture those half hulls, the discussion that I heard

1 this gentleman make was that you need the room to move  
2 those hulls around. I would think the movement room is  
3 only necessary when you bind the two half hulls  
4 together. If that's true, why can't the majority of the  
5 manufacturing facility be lower and the scrubbers would  
6 be more efficient. And then the area where they combine  
7 the hulls, why isn't that area the only area that has the  
8 high ceilings or the big area required to do the  
9 movement? And they're just the observations I see. I  
10 just wanted to the make the comments.

11 The other final comment that I have is across  
12 the street from that is a swimming pool. Children of all  
13 ages and adults of all ages are going to be swimming at  
14 that swimming pool. At that homeowners association, what  
15 assurance do they have of their health? Thank you.

16 MR. WIDER: Thank you very much. Next?

17 MR. CHRISTIANSON: My name is Arthur  
18 Christianson. I live about three quarter of a mile south  
19 of the proposed plant or directly in the vicinity where  
20 this gentleman talked about south of there. I, too, when  
21 I drive 528 past the other plant, smell it. It smells  
22 bad. So do thousands of tourists who come to Florida to  
23 go on the cruise ships. If that isn't bad enough, then  
24 you look at the cruise ships and you see all that smoke  
25 come out.



1                   I have no use for pollution. I spent 15  
2 months in a hospital for my lungs. That area where Sea  
3 Ray is proposing to build use to be a scallop dump. They  
4 pulled the scallops out of the ocean. They didn't clean  
5 them very well, brought it up in stinky trunks and dumped  
6 it. Sea Ray should be well-aware of that if the wind  
7 blew from the north that stuff drifted over what's now a  
8 residential area. In fact, some people said you could  
9 smell it all the way down to 520, so you can imagine  
10 what's going to happen to the pollutants from Sea Ray  
11 proposed plant, especially since you say you're going to  
12 give a permit saying, well, you can go ahead and operate  
13 and come up with something later to clean the air. In  
14 the mean time, I got to breathe that stuff in my lungs,  
15 among other things.

16                   What makes it even worse -- no one has brought  
17 this up either -- there's a grammar school right below  
18 where this gentleman lives. What are these kids going to  
19 do? They going to go out and play in the pollutants?  
20 Then you have Kelly Park West where all the kids come and  
21 play soccer this time of the year.

22                   I don't think you have really studied this,  
23 studied this situation or the area. You want to know  
24 which way the winds blow, go up to Port St. John and look  
25 at those smokestacks. They'll show you. You don't need

1 to study how we're going to get rid of this pollutant air  
2 that generates. You have enough knowledge already. I  
3 can go out here. I fly gliders. I can get 1,000 feet  
4 above the ground and I can sit there and fly in that  
5 (unintelligible) area all day long if I want to, just by  
6 heating up the area. You can do the same thing with the  
7 stuff from the plants. All they're doing is stalling you  
8 at the expense of the people living across the street.  
9 Now, anybody in his right mind, knowing those conditions  
10 like Sea Ray obviously do since they've had their plant  
11 so it's grandfathered so they can stink up the place,  
12 should know that, and they don't care, obviously. Who  
13 else would build a plant in a residential area or  
14 environmentally sensitive area?

15 On the other side of the Barge Canal is  
16 another development and a golf course. So the wind comes  
17 from the south, they'll get it. In the other case, just  
18 turns around and the kids at the school get it. If you  
19 want to get a better picture of it, go up to Pulte Homes,  
20 they got one on the wall, and they'll show you all the  
21 way down to the school where it is, and they'll show you  
22 -- it doesn't show the new Kelly West because it was  
23 just built by the county. But I think you need to study  
24 the subject before you give a permit. Obviously you  
25 haven't, in my opinion, anyway. Thank you.

1 MR. WIDER: Thank you, Mr. Christianson.

2 Ma'am.

3 MS. YUNIS: My name's Rachael Yunis and I'm  
4 a genetic engineer. So I have one quick question. You  
5 don't have to answer it right now, but afterwards if  
6 someone could give me information on where I could get  
7 the studies that have been done on styrene, like  
8 mutagenesis and stuff like that, and what they will  
9 cause, because I have two small children and I'd like to  
10 look at those studies and read them and decide for  
11 myself.

12 MR. REYNOLDS: We will send you a complete --

13 MS. YUNIS: That would be wonderful. Thank  
14 you.

15 MR. WIDER: Sir.

16 MR. CLAREY: My name is Barney Clarey. I'm  
17 president of the Island Crossing's Homeowners  
18 Association, the people that these people are talking  
19 about, and certainly I agree with all their comments.  
20 The smell of the plant is probably one of the major  
21 problems that we will face. We'll get complaints from,  
22 from our homeowners and most people think that will  
23 affect their property values, also.

24 Unlike other places, the housing area was  
25 there first. I don't know how long they planned to build

1 this plant, but the housing area has been there for a  
2 long time, so it's not like we built a housing area next  
3 to a plant that already existed.

4 I am concerned mostly about the time line  
5 associated with implementing the controls. Based on the  
6 data that's been given today, they have up to a year and  
7 a half to two years to get a full scale pollution control  
8 in the plant, and that concerns me. I don't think -- and  
9 my one question here is, involves what if the pilot  
10 project fails? Say they try the pilot project and it  
11 doesn't work? Do we have to go back to the drawing  
12 board? Do we have to restart the time line to come up  
13 with a new thing and then add on to the other? Do you  
14 have an answer for that? Yes? Okay. Well, we have  
15 problems with our builder that built the houses, and they  
16 have all these time lines associated with getting things  
17 done, and it's all legal, but the end result is it's  
18 years and years and years to get things taken care of.  
19 And I think most of the homeowners would not want to hear  
20 that it's going to be two years from the time they start  
21 producing the chemicals and the smell and things like  
22 that before anything can be done to help reduce that.

23 I would like to encourage that since the  
24 current plan has nothing on it now, they ought to start  
25 the pilot project there and get on with it and go from

1 there. That's all I have to say for now. Thank you.

2 MR. WIDER: Thank you, sir. Any other  
3 questions or comments? Okay. I have two more commentors  
4 here. Damian -- excuse me -- I'm going to mangle this.  
5 Ludwkzak.

6 MR. LUDWKZAK: Ludwkzak.

7 MR. WIDER: Ludwkzak.

8 MR. LUDWKZAK: Again, my name is Damian  
9 Ludwkzak and I also live in the same association housing  
10 complex as a lot of these folks do. I would like to  
11 first state that I am the father of a nice little  
12 four-week old baby, and in that housing development there  
13 are lots of young kids. I'm not against boats. I used  
14 to own a boat. I love boating. I'd like to see Sea Ray  
15 succeed. I'd like to see business progress and move the  
16 country forward.

17 However, when I looked at the little phamplet  
18 here, I'm not very familiar with EPA. I understand you  
19 do work to protect society and the people of the country,  
20 and I didn't hear anybody here today talk about what is  
21 considered or called an air quality index. And talking  
22 to my sister, Mrs. Yunis, who is a geneticist, I  
23 understand that there are certain amounts of this  
24 styrene, I don't know what it is, parts per million, that  
25 if it is inhaled by people, and in particular small

1 children, it can cause damage in the form of  
2 neurological, liver, et cetera, et cetera. I was  
3 wondering if anybody could tell me, first of all, what is  
4 that limit for small children?

5 MR. REYNOLDS: I will answer that by saying  
6 we have looked at that but, again, the degree to which  
7 that will affect the decision on this permit is, is, is  
8 somewhat indiscernible at this point. We do not have any  
9 rule or regulation that, that directly addresses that  
10 within our set of rules. In other words, to use that as  
11 a basis to deny, there's no clear authority for us to use  
12 that.

13 MR. LUDWKZAK: My biggest concern is that I,  
14 too, as an engineer understand you can do all the  
15 analysis you'd like. The real test or the real answer is  
16 a test, and what I'm thinking of is if you'd go ahead --  
17 and I heard a lot of talk today about putting in all  
18 types of scrubbers, et cetera, et cetera at the plant.  
19 That's all fine and good, but what I'm really concerned  
20 about is at my house where my little daughter sleeps,  
21 what are the levels? Now, I understand you got some kind  
22 of air quality index monitoring station, I think in  
23 Cocoa. I don't care. I live right across the street. I  
24 would propose, my suggestion, that you do not allow any  
25 permits for this to occur unless you guarantee me and my

1 neighborhood that we are at safe levels. I have no  
2 problem with them building this plant if we are at safe  
3 levels. I don't care what happens inside the plant,  
4 exterior to the plant, 50 feet above the plant. I care  
5 what happens at my house. Do you have any plans to  
6 monitor my neighborhood?

7 MR. REYNOLDS: There, there are no  
8 requirements in the permit right now.

9 MR. CLAREY: Can they be made in the permit?

10 MR. REYNOLDS: We will definitely consider  
11 that.

12 MR. CLAREY: Again, I have no problem with  
13 them doing this. I do have a big problem if it affects  
14 my life, my kid's life.

15 MR. REYNOLDS: Yes.

16 MR. CLAREY: And I think it is your job as  
17 the EPA to protect us. I understand this is big  
18 business, lots of money, it's good for the community, but  
19 please, keep in mind that within 200 yards there is a  
20 neighborhood of 300 or so brand new homes. Just south of  
21 there, there must be another thousand or so homes of  
22 people that you are, I guess, responsible to protect, and  
23 I just hope that you keep that in mind when you issue  
24 this permit. Not so much on your rules and regulations,  
25 I understand that, I work for the government, too, but I

1 want some assurance that my life, my kid's life and  
2 everybody that lives in that general area is safe, and I  
3 have not gotten that from this meeting.

4 MR. LINERO: Are you saying you would -- I'm  
5 sorry -- you would like to know -- okay. You would like  
6 to know what is considered a safe level for exposure in  
7 the general population and you would like an estimate of  
8 what the likely concentration is in your particular area?

9 MR. CLAREY: Yes. And if you don't know what  
10 the critical concentrations are, I don't see how you can  
11 go ahead and issue a permit without that data.

12 MR. LINERO: I believe, actually, you know, I  
13 couldn't tell it to you off the top of my head, but I  
14 believe, I believe we have that information in one form  
15 or another because certain modeling was done at the  
16 existing facility, and part of the design of the existing  
17 facility, although it wasn't to add control equipment,  
18 had to do with getting enough dispersion so that the  
19 ambient concentrations and exposure of the general public  
20 was held down to, to what was considered below, you know,  
21 below a critical value. And, of course, that was  
22 something on the order of one one-hundredth of the, of  
23 the value required for worker protection.

24 The value, as I understand for worker  
25 protection a few years ago was a hundred parts per



1 million, then I believe that got dropped to 50 parts per  
2 million. Now they're talking about 25 parts per  
3 million. I think one of the gentlemen that talked before  
4 you, he said I calculated this out and I don't know  
5 whether it's 16 parts per billion or 6,000 parts per  
6 billion, but I believe we have that information. My  
7 understanding is that, you know that we have it. I  
8 believe that we developed it regarding the existing plant  
9 where it's there, and I believe Sea Ray wanted to make  
10 some comments here, and their comments are just like  
11 yours. They can come up and make some comments, too.  
12 They wanted to try to convey to you and the community  
13 what they feel the impacts are on the community and their  
14 estimates and, again, you know, we would, we could  
15 independently make an estimate and send it, send it to  
16 you. You're saying as the crow flies you're 200 yards  
17 from, from --

18 MR. CLAREY: Yes. And I understand you might  
19 have a lot of studies that indicate what the critical  
20 levels are. And what I'm concerned about primarily in  
21 the neighborhood is children.

22 MR. LINERO: Exactly.

23 MR. CLAREY: If you do know the numbers, how  
24 do you assure me that in my house that is the level I am  
25 getting at my house. I don't care about the plant.

1                   MR. REYNOLDS:    The information that we have  
2                   is primarily concerning occupational exposure.

3                   MR. CLAREY:     Does it not concern you about  
4                   the surrounding areas?

5                   MR. REYNOLDS:    We, we do not know what the  
6                   concentrations will be.  Now, as Mr. Linero just said,  
7                   there, there has been some ambient modeling done, and Sea  
8                   Ray can address that if they choose.  Would Sea Ray care  
9                   to address that?

10                  UNIDENTIFIED SPEAKER IN AUDIENCE:  Yes, sir,  
11                  whenever you are done.

12                  MR. REYNOLDS:    Okay.

13                  MR. CLAREY:     All I'm saying is, is I would  
14                  really like to know what's going on at my house, and if  
15                  appropriate I would grant you permission to put a  
16                  monitoring device in my backyard.  I'll give you the  
17                  space.

18                  MR. LINERO:     Yeah.  Right.  Okay.  We -- I, I  
19                  don't believe we have the resources to put a monitor in  
20                  your backyard.  I don't know what this would cost and so  
21                  forth, and I'm not sure what method we would use to  
22                  monitor styrene, but, you know, we can discuss it with  
23                  the technical people who understand this a little better  
24                  and maybe even try, you know, maybe even try to find a  
25                  source of funding for it, but we can look into it.  I

1 think we can provide you with some estimates of the  
2 concentrations in your, you know, in your neighborhood,  
3 and I believe that typically what they, what they shoot  
4 for for the general population is a design parameter, not  
5 a standard, because we don't have a standard, but as a  
6 design parameter, they typically shoot for something on  
7 the order of about one percent of what a, what a healthy  
8 worker can tolerate. So if we're talking one percent of  
9 a more conservative value of 25, that would be 250 parts  
10 per billion.

11 MR. CLAREY: Okay. I understand. Just,  
12 also, that's for workers, not small four-week-old  
13 children.

14 MR. REYNOLDS: There's a world of information  
15 you can access directly on the internet if you will, if  
16 you will go to pubmed, P-U-B-M-E-D, and you can access  
17 abstracts, not the entire articles, you can order those  
18 and they're about \$10 a piece, but you can get the  
19 abstracts directly off of that web site. And all you do  
20 is you type in styrene and hit search and it will pull  
21 them up for you.

22 MR. CLAREY: I understand. I appreciate you  
23 saying you did go back and do research on what our  
24 critical values. I'm just concerned how do we know,  
25 indeed, we are below critical values. That's just my one

1 comment.

2 Two other small comments and I'll leave the  
3 floor. The -- I have to admit that I agree with I think  
4 Mr. Rowe here that folks at Sea Ray being, having built  
5 the building without their permit is going against the  
6 rules. I'm looking strictly at your book here. As far  
7 as permitting programs it says, they must obtain a permit  
8 before beginning construction or operation. I understand  
9 that the current buildings that are built, perhaps, are  
10 not the ones emitting it, but it's very obvious what that  
11 facility is intended to do, and I think there's a strict  
12 violation of your rules and I'd like to see some sort of  
13 review of that from the EPA.

14 And the final thing is, besides the health of  
15 my daughter and family and everybody else in my  
16 neighborhood, I do have a major concern as stated by the  
17 association president that the value of my house has a  
18 potential to drop and we have 300 other folks that tend  
19 to lose money on this where Sea Ray has a tendency to  
20 gain money on it, and I'd like that to be taken into  
21 consideration, if possible. I know there's probably no  
22 rules or regulations regarding that. With that, I  
23 appreciate your time. Thank you for your good work, and,  
24 hopefully, you will, and I recommend, you deny the  
25 permit.

1           MR. WIDER: Thank you, sir. I have another  
2 comment from Chris Teaf.

3           MR. TEAF: Thank you. My name is Chris  
4 Teaf. I'm a toxicologist at Florida State University in  
5 Tallahassee and I was asked to look at this question from  
6 the point of view of the very issue that has been raised  
7 here tonight by a number of the commentators. The main  
8 issue from a human health point of view we are concerned  
9 about is concentration, air concentration. And the  
10 question was raised a moment ago was a correct one, and  
11 that is what is the number.

12           EPA has identified what they call the  
13 reference air concentration. And the reference air  
14 concentration for styrene is the concentration which is  
15 designed, is demonstrated to be below the level which  
16 would cause human health effects, including sensitive  
17 populations, and that number is one milligram per cubic  
18 meter. One milligram per cubic meter is approximately  
19 250 parts per billion. So the gentleman who mentioned  
20 that number earlier tonight was correct.

21           I would also point out that ambient air  
22 modeling has been conducted by Golder Associates based on  
23 a distance out to five kilometers or about three miles  
24 from the plant. The concentrations that reach the  
25 property boundary, that is, from the inside going out,

1 don't exceed approximately 10 parts per billion or about  
2 35 or 40 micrograms per cubic meter, so you can see we're  
3 an order of magnitude below, at the property boundary,  
4 now, not at points where exposure could occur. I,  
5 myself, based on the information I reviewed don't have  
6 any concerns about the concentrations. I understand the  
7 issues of verification. They're certainly reasonable.  
8 However, the information is available to draw the  
9 conclusions that this facility can be operated properly  
10 and safely at the concentrations that we consider to be  
11 meaningful. There is a great deal of information about  
12 the toxicology of styrene and it is available and I would  
13 try to take an opportunity this evening afterwards to try  
14 to answer a couple of the questions that were raised.  
15 Thank you.

16 MR. WIDER: Thank you very much, sir. Are  
17 there any other --

18 MS. PHILLIPS: Oh, I had a question. Mr.  
19 Teaf, you are here representing Sea Ray; is that correct?

20 MR. TEAF: Yes, ma'am.

21 MR. WIDER: Okay. I believe my associate  
22 here, Scott Goorland, has another comment.

23 MR. GOORLAND: Well, before, is there any  
24 other comments or questions? Mr. Rowe?

25 MR. ROWE: Can I make an informational

1 announcement, or something of that nature, because you  
2 mentioned that in order to challenge this decision for  
3 Sea Ray or your permit that one has to file a paperwork  
4 for administrative hearing. I have done so, and I guess  
5 by telling people this time of the day and they haven't  
6 done so, if anybody does have a concern about it, I have  
7 done so and maybe we can get our heads together in  
8 reference to the subject matter.

9 MR. YUNIS: Are we allowed to direct  
10 questions to somebody else besides you guys?

11 MR. GOORLAND: I'm sure you can, but I don't  
12 know if we can do it on the record. I mean, perhaps we  
13 -- I'm not sure who you would want to address it to, but  
14 I'm sure whomever it is would be willing after the  
15 meeting to answer.

16 MR. YUNIS: I guess I would want my question  
17 to be on the record.

18 MR. GOORLAND: You can make any sort of  
19 comment you want. We can't ask anybody to answer.

20 MR. YUNIS: That's fair enough. My question  
21 is directed to the gentleman representing Sea Ray here.  
22 I guess a question on that, on your boundary number.  
23 Does that number consistently drop as you drop away from  
24 the facility, since you have 55-foot stacks, or does that  
25 go up at some point at the ground level?

1 MR. TEAF: (Inaudible).

2 MR. YUNIS: So that boundary level was at  
3 ground level?

4 MR. TEAF: Ground level, yeah.

5 MR. GOORLAND: Is there any other comments or  
6 questions at all? Okay. Before we finish up, I wanted  
7 to add that this permit still is not a final permit. We  
8 have not issued it as a final permit. We're here today  
9 because we wanted to get your comments. We want to  
10 consider your comments in determining what we do with  
11 this permit. The comment period is not over. After this  
12 meeting concludes, I believe it goes -- is it the 30th?  
13 November 30th.

14 MR. LINERO: I'm going to play it safe and  
15 say November 29th. I know it was publicly noticed the  
16 31st of October, and I believe there's a period of 30  
17 days. I'm -- so, that play it safe and the 29th.

18 MR. GOORLAND: So if anybody still wants to  
19 make any comments, they can do it. You can do it in  
20 written form to an address we can give you.

21 MR. LINERO: And the e-mail that's on the  
22 information sheet.

23 MR. GOORLAND: Thank you.

24 MR. WIDER: Are there any other questions or  
25 comments? Well, then, in that case, I will declare this



1 meeting over, and I appreciate all of you coming out  
2 tonight, and we really appreciate the opportunity to try  
3 to address some of your concerns. Thank you.

4 (Thereupon, the meeting concluded at 10:00  
5 p.m.)

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## CERTIFICATE OF REPORTER

1  
2  
3 I, NANCY M. WINGO, RPR-CP, certify that I was  
4 authorized to and did report the foregoing public meeting  
5 and that the foregoing pages constitute a true and  
6 correct transcription, to the best of my ability, of the  
7 testimony given.

8  
9 I FURTHER CERTIFY that I am neither a relative  
10 nor an employee of counsel, nor of any of the parties,  
11 and not financially interested in the event of this  
12 cause.

13  
14 Dated this 22nd day of November 1999.

15  
16  
17   
18 NANCY M. WINGO, RPR-CP

*John P.*

Post-It® Fax Note	7671	Date	11/16/99	# of pages	2
To	Clair Fancy	From	Andra Cornelius		
Co./Dept.		Co.			
Phone #		Phone #	921-1122		
Fax #	922-6979	Fax #			

**Sea Ray Boats, Inc.**

Pending PSD Air Permit Issues  
November 11, 1999

Issue	Draft Permit	Sea Ray's Suggestion	Rationale for Change
1. Scale of "Pilot Study"	Ambiguous as to scale/scope of study.	True "pilot-scale" study, limited to a small portion of the lamination area.	While it will still cost around \$500,000, the study will be better focused on a small portion of the lamination building. Sea Ray proposed some additional clarifications, and an increase in the capture design from 53 to 80 percent.
2. Agency action following study	If add-on controls are found to be technically and economically feasible, full-scale controls required.	If not technically and economically feasible, remove pilot-scale equipment without further regulatory review; if feasible, DEP should propose a permit revision for full-scale controls, allowing for administrative remedies.	Because the removal of any pollution control equipment could be considered a change causing an increase in emissions, it is important to clarify that additional regulatory authorization is not needed. If DEP finds that full-scale add-on controls are technically and economically feasible based on the study results, then Sea Ray should be given an opportunity to challenge this determination and subsequent emission limits.
3. Case-by-case MACT remaining as BACT floor	Even though the final NESHAP will replace the case-by-case MACT, the permit states that the case-by-case MACT will remain as the BACT floor.	The case-by-case MACT should be removed from the permit once the NESHAP is promulgated, and should not remain as the BACT floor.	The case-by-case MACT is based in large part on EPA's draft NESHAP and other existing NESHAPs that are not directly applicable to Sea Ray's operations. There has been no facility-specific analysis to demonstrate that the MACT elements are justified as BACT. To ensure that the provisions in the permit are appropriate and that Sea Ray remains competitive with other boat manufacturers that would be subject only to the final NESHAP, the case-by-case MACT should eventually be deleted entirely. Issues to be resolved in NESHAP include: <ul style="list-style-type: none"> <li>• System for demonstrating compliance with HAP limits for resins and gel coats</li> <li>• Exterior non-wood coating HAP limits</li> <li>• Pigmented gel coat HAP limits</li> <li>• Adhesive, interior wood coating HAP limits</li> </ul>
3. Resin and gel coat limits	Separate HAP content limits for each type of resin and gel coat.	Aggregate maximum average limit for all resins and gel coats combined.	Consistent with what is expected for the final NESHAP, Sea Ray suggests an aggregate limit that is more straightforward from a compliance and enforcement perspective (because of the single vs. multiple limits).

P. 6

SAMS

NOV 12 11:50AM HG55-PA

NOV - 16 '99 (TUE) 10:10 EPI/DEP-TAL

TEL: 1 850 921 1101

P. 001

**Sea Ray Boats, Inc.  
Proposed Cape Canaveral Plant**

Drafting PSD Air Permit Issues

November 11, 1999

Issue	Draft Permit	Sea Ray's Suggestion	Rationale for Change
4. Cleaning solvents	Refers to "resin and gel coat cleaning solvents."	Clarifies cleaning solvents as those "in the lamination operation to clean resin and gel coat equipment and tools."	The suggested change defines what is meant by "cleaning solvents" for purposes of the HAP limitation in the permit.
5. Carpet and fabric adhesives	Silent as to aerosol and contact adhesives.	Excludes aerosol adhesives and contact adhesives applied to nonporous substrates.	This exclusion is consistent with the condition on carpentry adhesives, which was taken from the wood furniture manufacturing NESHAP.
6. Carpentry adhesives/ interior wood parts	Separate conditions for each of these activities.	Combines two activities into one condition, and requires compliance with the wood furniture manufacturing NESHAP.	This will clarify that Sea Ray should comply with the wood furniture manufacturing NESHAP, rather than only portions of the NESHAP.
7. MSDS values	Requires highest range from MSDS sheets for VOCs and HAPs.	Mid-level range should be used for VOCs and highest level for HAPs.	For VOCs, the MSDS sheets provide a range that can sometimes be over 100%. It is the normal practice to take the mid-point of the range. For HAPs, the highest value will be used, consistent with the emissions data provided in the permit application.
7. PM/PM <sub>10</sub> controls	Applies PM/PM <sub>10</sub> controls to grinding operations in Building 001.	PM/PM <sub>10</sub> controls should apply to woodworking operations in Building 002.	PSD and BACT were not triggered for PM/PM <sub>10</sub> emissions. This change correctly reflects that Sea Ray had proposed controls for the woodworking operations in Building 002.
5. Record keeping	Completion of records no later than 5 days after end of each month.	Completion of records no later than 5 <u>working</u> days after end of each month.	Because the plant operates only 5000 hours per year and will occasionally be closed for 4 and 5 days at a time, this clarification would ensure that the records could be kept timely.
6. Hours of operation	8760 hours per year.	5000 hours per year.	Since Sea Ray based its PSD analysis on 5000 hours per year, the limit should be included in the permit.
7. Odor enforcement	Ambiguous as to whether EPA can enforce odor provision.	Clarification that odor provision not federally enforceable.	As part of the PSD permit, any provision could be considered federally enforceable unless otherwise noted. Sea Ray requests this clarification since the odor rule should not be enforced by EPA.

P. 7

SAMS

NOV 12 11:51AM PGSS-PA

Post-It <sup>®</sup> Fax Note	7671	Date	11/16/99	# of pages	2
To	Clair Fancy	From	Andra Cornelius		
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Phone #		Phone #	921-1122		
Fax #	922-6979	Fax #			

**Sea Ray Boats, Inc.**  
~~Department of Environmental Protection~~  
 Pending PSD Air Permit Issues  
 November 11, 1999

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P.6

SAMS

PA 11:50AM HGSS-66, 21 NOV

NOV -16' 99 (TUE) 10:13 EPI/JEP-TAL

TEL: 1 850 921 1101

P.001

**Sea Ray Boats, Inc.  
Proposed Cape Canaveral Plant**

*Pending PSD Air Permit Issues*

*November 11, 1999*

<b>Issue</b>	<b>Draft Permit</b>	<b>Sea Ray's Suggestion</b>	<b>Rationale for Change</b>
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P.7

SAMS

NOV 12 '99 11:51AM HGSS-PA

NOV 12 '99 11:51AM HGSS-PA

**National  
Marine  
Manufacturers  
Association**

copy: AL  
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NOV 15 1999

BUREAU OF AIR REGULATION

November 14, 1999

Mr. C.H. Fancy  
Chief, Bureau of Air Regulation  
Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RE: Sea Ray Boats DEP File No. 0090093-003-AC / PSD-FL-274

Dear Mr. Fancy:

At the request of Sea Ray Boats, Inc, the National Marine Manufacturers Association (NMMA) is submitting the following comments regarding the Florida Department of Environmental Protection (FDEP) determinations of Best Available Control Technology (BACT) and Maximum Achievable Control Technology (MACT) for the Merritt Island Facility Cape Canaveral Plant, Brevard County, Florida.

The NMMA with over 1500 members is the largest recreational marine trade association in the US representing recreational marine boat builders, engine manufacturers, and marine accessory products. With over 50% of our members owning businesses in Florida, NMMA has the obligation to address any inaccuracies or misrepresentations that may be raised in regulatory determinations. In addition, NMMA has been working closely with the USEPA since 1994 on Section 112 (g), the boat manufacturers presumptive MACT, and currently the development of the NPRM. It is our sincere desire that these comments will begin the process of constructive dialogue, so that both a technically and economically feasible MACT / BACT standard can be developed, one that can be used as a template for future MACT / BACT determinations.

NMMA appreciates the challenges that the FDEP faces in developing a BACT / MACT standard for Sea Ray Boats and is offering its resources to assist the Agency in these efforts.

**BACT comments**

NMMA is concerned with the information and methodology that FDEP used in developing the BACT determination, specifically the requirement for installing an end of



stack capture and destruction system. In developing the supporting technical justification for identifying BACT as capture and destruction, FDEP identifies the Bombardier facility in Benton, Illinois, if it was using a 35% resin applied with non-atomized equipment, as the best controlled source in the boat building industry. In this discussion, the FDEP identifies and then attempts to resolve the problems associated with airflow and its impact on the OSHA worker exposure levels. This is followed by a technically irrelevant discussion, which identifies a device made by Big Top Manufacturing for capturing the exhaust stream in spray paint finishing as a potential applicable solution. This analogy disregards the basic chemical and flammability differences between paint and unsaturated polyester resin. The FDEP is correct in identifying Bombardier's Benton plant as the one US boat builder that has a capture and destruction device. The FDEP is wrong to use this facility as the basis for identifying BACT for Sea Ray Boats. Bombardier manufactures small (less than 20 ft.) shallow hull jet drive boats. Sea Ray Boats manufactures deep hulls and decks up to 60 ft.

Bombardier operates under two permits applicable to the same location, one for 500 tons and the other for 149 tons. The operation under the 149-ton permit has no controls. The operation under the 500 ton permit has an incinerator with a 91 percent destruction efficiency, capturing 82.8 percent emissions. This results in an average destruction of 75% (the 75% destruction applies to one of the three lamination cycles at the facility). Bombardier manufactures jet boats in a tunnel where emissions are captured during the spray application process. Following the process, the air volume is increased and the incinerator is bypassed as the hand roll out process commences. During the final cure process, the exhaust air volume is decreased and the exhaust gas is again passed through the incinerator. This facility was designed so that Bombardier could apply high styrene resins using robotic equipment, a technology that is used in its Canadian personal watercraft plant.

FDEP has made a common incorrect engineering judgement by assuming that if Bombardier were to be required to use low styrene resins, non-atomized application equipment, combined with the incinerator, their total emissions would be lower. To assume this is to not understand the problems associated with trying to burn styrene emissions as they are released from the application and curing of unsaturated polyester resin (UPR). First, UPR is not paint and styrene is not the hazardous air pollutant of concern in paint emissions. Paint booths are not applicable. Second, the problem with incinerating styrene is achieving a high enough concentration so that it will burn. The lower flammability limit for styrene is 11,000 ppm. Results from tests conducted spraying high styrene resin in an enclosed area with no ventilation indicated that the maximum levels of vapor concentration were less than 690 ppm. When ventilating the work area to achieve the levels necessary to meet the worker exposure limits, the vapor concentration levels passing through the plenum of the incinerator would be less than 1% of the lower flammability limit. To operate an efficient incineration system requires much higher concentrations. A properly designed system would need to use the highest styrene level resins available and either reduce or recirculate the air in a closed environment. This is one of the reasons Bombardier uses high styrene resins, making its type of process equivalent to 35% styrene resin applied with non-atomized application.



In the discussions where FDEP compares capture and destruction systems at reinforced plastics operations it is important to understand the critical differences between recreational boat manufacturing and reinforced plastic operations. First and foremost, most boat building facilities require significantly higher air flow volumes to meet the worker exposure limits. This was Congress's rationale for creating a separate subcategory of sources when establishing emission standards under Section 112 g. In the minutes of the 1989 report of the Senate Committee on Environment and Public Works it was stated that "Emissions from the recreational boat building industry are far greater in air volume and lower in styrene content than similar emissions from the reinforced plastics industry." In the 1989 permissible exposure limit (PEL) rulemaking, OSHA identified and recognized that it would be necessary for boat builders to have far greater air flow requirements than the rest of the reinforced plastics industry in order to meet the 50 ppm PEL. Sea Ray's deep hull design is a good example of the reasoning behind these determinations. Sea Ray must first design its plant to meet the OSHA safe worker exposure requirements and then look for ways to limit the air emissions, working within those design parameters.

## **MACT comments**

### ***Marine coating and anti-foulant***

Since the FDEP made its MACT determination that would require Sea Ray Boats to meet the same coatings standard as cited in the shipbuilding NESHAP, the USEPA has completed its applicability determination with the conclusion that boats are not covered under the shipbuilding NESHAP. Regardless, the FDEP has stated that it plans to require recreational boats to meet the same standards as ships because both are "structurally similar in design and capacity."

Structural design and capacity are not factors that are used to determine the type of marine coating or anti-foulants used on recreational boats. First, commercial ships are generally made of steel, while recreational boats are made of fiberglass reinforced plastic. The base material where the paint is applied is of critical concern when formulating recreational marine paints. The second factor is that recreational boats are painted for appearance, while a commercial ship is painted solely for protection. Recreational boats will use a high quality, high gloss finish, which would serve no purpose on a commercial ship. Recreational marine paints are also formulated for different purposes. For instance a boat builder that needs to cover a hull blemish or seam that may be caused by extending a hull or deck section would use a completely different product than a boat builder or boat yard that is strictly painting or repainting a boat. These products would vary in both formulation and HAP content. Another application for marine coating includes stencil or graphic artwork. These paints are different altogether and would also require a different formulation and HAP content.

NMMA agrees with the FDEP determination that marine coatings and antifoulants should be covered under the MACT standard, but does not want to see a standard that prohibits

specific types of applications. NMMA is currently working closely with Ms. Kim Teal, USEPA project manager for the Plastic Parts Coating MACT and Mr. Mark Morris, boat MACT project manager to provide more information regarding this issue. NMMA recommends that the FDEP hold off setting a standard for marine coatings and anti-foulants until the USEPA has resolved the difficult technical issues associated with regulating this process.

### **Wood Furniture Coatings**

NMMA does not object to the FDEP requirement that interior wood furniture on boats meet the HAP limit requirements as stated in the wood furniture NESHAP, but as EPA determined in a previous Region IV applicability determination, boats are not covered under the wood furniture NESHAP. NMMA also recognizes that the majority of boat builders, including Sea Ray, would fall under the category of incidental furniture manufacturers if they were covered under the wood furniture NESHAP. That is, a “a major source that is primarily engaged in the manufacture of products other than wood furniture or wood furniture components and that uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components.” To not recognize the incidental use category, but impose the HAP limits would unfairly impact the boat manufacturing industry.

### **Production resin and gel coat**

NMMA agrees with the FDEP determination that new and existing source MACT be 35% styrene resin with non-atomized application. NMMA is still negotiating whether the requirement for pigmented gel will be set at 33% or 34%. The requirement for 33% considers averaging lower styrene base coat gel coat. For boats that do not use base coat gel coat, but rather use higher styrene back-up gel coat and vinyl ester skin coat, they would not be able to meet the 33% standard. Back up gel coat and skin coat are generally used on Class A ocean yachts and sailboats. Skin coat is the protective layer of resin applied between the gel coat and the laminate that provides corrosion resistance and prevents osmotic blistering.

NMMA recognizes operator training as an administrative burden with no environmental benefit. Standard operating procedures for Sea Ray Boats and other boat builders requires the careful measuring of resin / catalyst mixtures. A high quality gel coat and laminate finish is everything in a boat. It is what the consumer sees and demands. Any boat builder that did not properly train its gel coaters and laminators or was to retain an employee who was sloppy or did not perform quality work would quickly go out of business. NMMA recognizes that this requirement not be included in a MACT determination.

### **Tooling gel coat and resin**

FDEP has identified 30% HAP as new source MACT for tooling resin and 40% HAP for tooling gel coat. There has been considerable discussion with EPA regarding both these subjects. First, there is not a 30% styrene resin. The styrene content of the resin used by Sea Ray is an average of 31% HAP. Furthermore, NMMA has had discussion with EPA

regarding the accuracy of the one manufacturer that states a 40% gel coat on its MSDS sheet. These discussions are ongoing. All other tolling gel coat suppliers, including by far the largest CCP, offer gel coats with not less than 48% HAP. After reviewing the following summary, NMMA believes that the FDEP should withhold any determination on tooling until the EPA has fully investigated and resolved this issue. ✓

Tooling plays a critical role in determining the quality, durability and appearance of the hull, deck, and associated fiberglass parts of a recreational boat. No quick or easy process exists by which quality polyester tooling can be produced. The production of quality tooling involves a precise, painstaking craft. This process starts with careful preparation of the pattern and concludes with the final building of the mold. The surface of the pattern must reflect the mirror finish desired in the mold and the mirror finish in the mold must be maintained to ensure the quality of the final parts. Proper resin and gel coat are the keys to production of quality tooling; if the resin and gel coat are not appropriate for the type of application or are not applied correctly, a poor quality mold will result and a great deal of labor will have been wasted. Thus, proper application and use of appropriate materials are critical to producing quality, aesthetically appealing and durable recreational boats. Improper or less durable tooling increases the total cost of production. The incremental increase in production costs depends upon the number of rejected tooling produced before an acceptable one is created, taking into consideration the increased labor and materials costs and resulting delays in production.

The NMMA has reviewed both the Information Collection Requests ("ICRs") and other information provided by its members. This information indicates that the average boat manufacturing facility generally uses less than two percent of their total resin and gel coat usage in tooling activities. Some smaller boat builders that make fewer boats, but require the same number of molds, may report a slightly higher resin and gel coat tooling percentage, but even in these cases the total usage and corresponding emissions are negligible. For example, based on the ICR information from a typical production type boat builder, one facility used approximately 3.2 million pounds of resin and 650,000 pounds of gel coat in a given year. For tooling operations, this boat builder used approximately 75,000 pounds of resin and 7,000 pounds of gel coat. Based on this information, which corresponds with activities at other boat facilities, generally less than two percent of the total annual resin and gel coat used was for tooling. ✓ The total annual combined styrene emissions from tooling resin and gel coat activities at this facility, using the default values in the EPA-ORD styrene emission model and the MACT floor of 35 percent styrene production resin and 34 percent production gel coat, are approximately 4,500 pounds. If a 40 percent styrene resin and a 45 percent styrene gel coat are used for this tooling operation instead of the MACT floor, the increase in total annual combined styrene emissions would be 850 pounds. Even with this higher styrene content, the HAP emissions from tooling resin and gel coat use represent approximately .0033 percent of the total HAP emissions for the facility.

Further, boat manufacturers would face significant costs to meet a MACT standard for tooling resin and gel coat. As the NMMA previously has explained to the Agency, boat

manufacturers cannot compromise the quality of the materials used in tooling activities. The production of quality tools depends substantially upon the use of high-quality materials, which contain higher HAPs. If manufacturers were to use low-HAP materials, such as low-styrene compounds, the quality and the longevity of the resulting tools would decrease. Facilities then would be forced to replace low quality tools more frequently, more than offsetting any emissions reductions that would be achieved from the use of the low-HAP substitutes. Ironically, regulation of tooling activities actually may increase rather than decrease HAP emissions. In the alternative, boat manufacturers might be forced to contract for these activities to be performed off-site at sources not otherwise subject to the MACT rule. Such a result also would significantly increase costs at boat manufacturing facilities.

### **Mold Sealing, Releasing, Stripping and Repair Activities**

NMMA agrees with the FDEP in its determination to exempt mold sealing, releasing, stripping, and repair activities.

### **Exterior Wood Parts**

NMMA agrees with the FDEP determination to exempt exterior wood parts..

### **Resin and gel coat Equipment cleaning**

In the boat manufacturing process, resin and gel coat frequently harden or adhere to the equipment used to apply these materials. Boat manufacturers primarily use non-HAP-based products to clean this equipment; however, non-HAP-based products are not always sufficient to remove the resin and gel coat. On occasion, facilities must use solvents to remove materials that are hard to clean. The NMMA believes this problem will increase with the use of flow coaters, which EPA anticipates requiring under the boat manufacturing MACT rule. Most facilities currently use spray guns with a single orifice nozzle to apply resin and gel coat. Flow coaters use a nozzle with multiple tiny orifices for materials application, making the equipment far more difficult to clean.

Non-HAP-based products that can remove resilient materials from resin and gel coat equipment as effectively as solvents are not commercially available. As a result, facilities will need to maintain a small quantity of solvents on site to clean equipment that cannot be cleaned effectively with non-HAP-based cleaning products. Without the ability to use a small amount of solvents, boat manufacturing facilities would incur significant costs. At the least, they would face significant equipment down-time to clean equipment with non-HAP-based products. Alternatively, boat manufacturers might be forced to throw away equipment that cannot be cleaned with non-HAP-based products. This practice would be exceptionally wasteful and expensive. Replacement of this equipment several times per year would result in significant costs that do not justify the minimal HAP emissions from the use of 25 gallons per month of solvents.

As an alternative to the above choices, facilities simply could clean equipment off-site. Equipment parts are portable and easily could be taken off site and cleaned with solvents that are readily available at the local hardware store. This solution would allow facilities to avoid significant down-time for equipment cleaning with non-HAP-based products or the discarding of equipment that cannot be cleaned. The NMMA does not believe that FDEP should encourage this practice as it will allow boat manufacturers to avoid all accountability for the solvents used for resin and gel coat equipment cleaning.

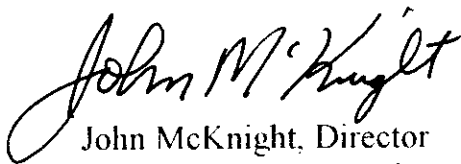
Boat manufacturing facilities typically use 200- 300 gallons of cleaning products annually. At most, solvents comprise approximately 100% of this amount. Because the majority of these solvents are used until spent and then recycled either on site or off site, the HAP emissions associated with these solvents would equate to approximately less than 100 pounds emissions annually per facility. Given the significant emissions versus the costs and burden to industry to regulate these *de minimis* emissions, regulating this amount cannot be justified considering the negligible environmental or public health benefit attendant to regulation.

### **Carpet and Fabric Adhesives**

NMMA continues to work with EPA on this issue. The problem is that those adhesives that set the MACT floor were ones where fabrics and substrates water-based applications were applicable. This is not the case for all adhesive applications in boat building. In addition, EPA only surveyed the industry for carpet and fabric and does not have ICR information for other adhesive applications. Information recently supplied to EPA identified over 30 different types of adhesives used for various applications throughout the boat. The list consisted of many water-based adhesives, but also some that need to be HAP-based.

NMMA appreciates the opportunity to provide written comments regarding this BACT / MACT analysis. NMMA is interested in working with the Agency to develop a technically and economically feasible standard, one that will protect the environment and while preserving existing jobs and creating new jobs in Florida. I look forward to your response. Please call me at 202-721-1604.

Sincerely,



John McKnight, Director  
Environmental and Safety Compliance

CC: A. Lineo  
J. Reynolds  
C. Phillips  
L. Kozlov, CD  
EPA  
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November 8, 1999

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Florida Department of Environmental Protection  
2600 Blair Stone Road, M.S. #5505  
Tallahassee, FL 32399-2400

Dear Ms Tober,

This letter is my request for a copy of DEP File No. 0090093-003-AC (PSD-F1-274) Sea Ray Boats, Inc., Merritt Island Facility Cape Canaveral Plant, Brevard County. I am enclosing a postal money order for \$20.00 to cover the cost of reproducing the file. Thank you for all of your assistance in this matter.

Yours truly,



Clarence Rowe



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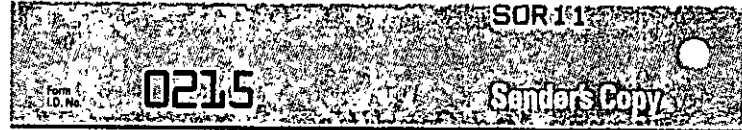
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