

APPENDIX V

Guidelines for the Implementation of the California Environmental Quality Act

California Code of Regulations, Title 14, Division 6, Chapter 3 Sections 15000–15387 and Appendices A–K

Source: CEQA: California Environmental Quality Act Guidelines and Discussions (1998). These sections were reprinted with the cooperation and permission of the California Resources Agency (December 1998)

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15092 Approval

- (a) After considering the final EIR and in conjunction with making findings under Section 15091, the lead agency may decide whether or how to approve or carry out the project.
- (b) A public agency shall not decide to approve or carry out a project for which an EIR was prepared unless either:
 - The project as approved will not have a significant effect on the environment, or
 - (2) The agency has:
 - (A) Eliminated or substantially lessened all significant effects on the environment where feasible as shown in findings under Section 15091, and
 - (B) Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093.
- (c) With respect to a project which includes housing development, the public agency shall not reduce the proposed number of housing units as a mitigation measure if it determines that there is another feasible specific mitigation measure available that will provide a comparable level of mitigation.

Note: Authority cited: Sections 21083 and 21087, Public Resources Code. Reference: Sections 21002, 21002.1, 21081, and 21085, Public Resources Code; Friends of Mammoth v. Board of Supervisors, (1972) 8 Cal. App.3d 247; San Francisco Ecology Center v. City and County of San Francisco, (1975) 48 Cal. App.3d 584; City of Carmel-by-the-Sea v. Board of Supervisors, (1977) 71 Cal. App.3d 84; Laurel Hills Homeowners Association v. City Council, (1978) 83 Cal. App.3d 515.

15091 Findings

- (a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
 - Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
 - (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
 - (3) Specific economic, <u>legal</u>, social, <u>technological</u>, or other considerations, <u>including provision of employment opportunities for highly trained workers</u>, make infeasible the mitigation measures or project alternatives identified in the final EIR.
 - (b) The findings required by subsection (a) shall be supported by substantial evidence in the record.
 - (c) The finding in subsection (a)(2) shall not be made if the agency making the finding has concurrent jurisdiction with another agency to deal with identified feasible mitigation measures or alternatives. The finding in subsection (a)(3) shall describe the specific reasons for rejecting identified mitigation measures and project alternatives.
 - (d) When making the findings required in subsection (a)(1), the agency shall also adopt a program for reporting on or monitoring the changes which it has either required in the project or made a condition of approval to avoid or substantially lessen significant environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other measures.
 - (e) The public agency shall specify the location and custodian of the documents or other material which constitute the record of the proceedings upon which its decision is based.
 - (f) A statement made pursuant to Section 15093 does not substitute for the findings required by this section.

Note: Authority cited: Sections 21083 and 21087, Public Resources Code. Reference: Sections 21002, 21002.1, and 21081, and 21081.6, Public Resources Code; Laurel Hills Homeowners Association v. City Council (1978) 83 Cal.App.3d 515; Cleary v. County of Stanislaus (1981) 118 Cal.App. 3d 348; Sierra Club v. Contra Costa County (1992) 10 Cal.App.4th 1212; Citizens for Quality Growth v. City of Mount Shasta (1988) 198 Cal.App.3d 433.

15370 Mitigation

"Mitigation" includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments.

Note: Authority cited: Sections 21083 and 21087, Public Resources Code. Reference: Sections 21002, 21002.1, 21081, and 21100(c), Public Resources Code.

15358 Effects

"Effects" and "impacts" as used in these Guidelines are synonymous.

- (a) Effects include:
 - (1) Direct or primary effects which are caused by the project and occur at the same time and place.
 - (2) Indirect or secondary effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems.
- (b) Effects analyzed under CEQA must be related to a physical change.

Note: Authority cited: Sections 21083 and 21087, Public Resources Code. Reference: Sections 21068 and 21100, Public Resources Code.

15126.2 Consideration and Discussion of Significant Environmental Impacts

- (a) The Significant Environmental Effects of the Proposed Project. An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described. giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. For example, an EIR on a subdivision astride an active fault line should identify as a significant effect the seismic hazard to future occupants of the subdivision. The subdivision would have the effect of attracting people to the location and exposing them to the hazards found there.
- (b) Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented. Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.
- (c) Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented. Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future

- generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.
- (d) Growth-Inducing Impact of the Proposed Project. Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Note: Authority cited: Sections 21083 and 21087. Public Resources Code. Reference: Sections 21002. 21003, and 21100. Public Resources Code; Citizens of Goleta Valley v. Board of Supervisors. (1990) 52 Cal.3d 553; Laurel Heights Improvement Association v. Regents of the University of California. (1988) 47 Cal.3d 376; Gentry v. City of Murrieta (1995) 36 Cal.App.4th 1359; and Laurel Heights Improvement Association v. Regents of the University of California (1993) 6 Cal.4th 1112; Goleta Union School Dist. v. Regents of the Univ. of Calif (1995) 37 Cal.App.4th 1025.

15126.4 Consideration and Discussion of Micigation Measures Proposed to Minimize Significant Effects

- (a) Mitigation Measures in General.
 - (1) An EIR shall describe feasible measures which could minimize significant adverse impacts, including where relevant, inefficient and unnecessary consumption of energy.
 - (A) The discussion of mitigation measures shall distinguish between the measures which are proposed by project proponents to be included in the project and other measures proposed by the lead, responsible or trustee agency or other persons which are not included but the lead agency determines could reasonably be expected to reduce adverse impacts if required as conditions of approving the project. This discussion shall identify mitigation measures for each significant environmental effect identified in the EIR.
- (B) Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.
- (C) Energy conservation measures, as well as other appropriate mitigation measures, shall be discussed when relevant. Examples of energy conservation measures are provided in Appendix F.
- (D) If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed. (Stevens v. City of Glendale(1981) 125 Cal.App.3d 986.)
- (2) Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design.
- (3) Mitigation measures are not required for effects which are not found to be significant.
- (4) Mitigation measures must be consistent with all applicable constitutional requirements, including the following:
 - (A) There must be an essential nexus (i.e. connection) between the mitigation measure and a legitimate governmental interest. Nollan v. California Coastal Commission, 483 U.S. 825 (1987); and
 - (B) The mitigation measure must be "roughly proportional" to the impacts of the project. *Dolan v. City of Tigard.* 512 U.S. 374 (1994). Where the mitigation measure is an ad hoc exaction, it must be "roughly proportional" to the impacts of the project. *Ehrlich v. City of Culver City* (1996) 12 Cal.4th 854.
- (5) If the lead agency determines that a mitigation measure cannot be legally imposed, the measure need not be proposed or analyzed. Instead, the EIR may simply reference that fact and briefly explain the reasons underlying the lead agency's determination.
- (b) <u>Mitigation Measures Related to Impacts on Historical Resources.</u>
 - (1) Where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or reconstruction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant.

- (2) In some circumstances, documentation of an historical resource, by way of historic narrative, photographs or architectural drawings, as mitigation for the effects of demolition of the resource will not mitigate the effects to a point where clearly no significant effect on the environment would occur.
- (3) Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered and discussed in an EIR for a project involving such an archaeological site;
 - (A) Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.
 - (B) Preservation in place may be accomplished by, but is not limited to, the following:
 - Planning construction to avoid archaeological sites;
 - Incorporation of sites within parks, greenspace, or other open space;
 - Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site.
 - Deeding the site into a permanent conservation easement.
 - (C) When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code.
 - (D) Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented in the EIR and that the studies are deposited with the California Historical Resources Regional Information Center.

Note: Authority cited: Sections 21083 and 21087. Public Resources Code. Reference: Sections 21002. 21003, 21100, and 21084.1, Public Resources Code; Citizens of Goleta Valley v. Board of Supervisors. (1990) 52 Cal.3d 553; Laurel Heights Improvement Association v. Regents of the University of California. (1988) 47 Cal.3d 376; Gentry v. City of Murrieta (1995) 36 Cal.App.4th 1359; and Laurel Heights Improvement Association v. Regents of the University of California (1993) 6 Cal.4th 1112; Sacramento Old

APPENDIX F Energy Conservation

I. Introduction

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

- (1) decreasing overall per capita energy consumption,
- (2) decreasing reliance on natural gas and oil, and
- (3) increasing reliance on renewable energy sources.

In order to assure that energy implications are considered in project decisions, the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.

Energy conservation implies that a project's cost effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, lifetime costs may be determined more by energy efficiency than by initial dollar costs.

II. EIR Contents

Potentially significant energy implications of a project should be considered in an EIR. The following list of energy impact possibilities and potential conservation measures is designed to assist in the preparation of an EIR. In many instances, specific items may not apply or additional items may be needed.

- A. Project Description may include the following items:
 - Energy consuming equipment and processes which will be used during construction, operation, and/or removal of the project. If appropriate, this discussion should consider the energy intensiveness of materials and equipment required for the project.
 - Total energy requirements of the project by fuel type and end use.
 - 3. Energy conservation equipment and design features.
 - 4. Initial and life-cycle energy costs or supplies.
 - Total estimated daily trips to be generated by the project and the additional energy consumed per trip by mode.
- B. Environmental Setting may include existing energy supplies and energy use patterns in the region and locality.
- C. Environmental Impacts may include:
 - The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of

- the project's life cycle including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak and base period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- 5. The effects of the project on energy resources.
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

D. Mitigation Measures may include:

- Potential measures to reduce wasteful, inefficient and unnecessary consumption of energy during construction, operation, maintenance and/or removal. The discussion should explain why certain measures were incorporated in the project and why other measures were dismissed.
- The potential of siting, orientation, and design to minimize energy consumption, including transportation energy.
- 3. The potential for reducing peak energy demand.
- 4. Alternate fuels (particularly renewable ones) or energy systems.
- Energy conservation which could result from recycling efforts.
- E. Alternatives should be compared in terms of overall energy consumption and in terms of reducing wasteful, inefficient and unnecessary consumption of energy.
- F. Unavoidable Adverse Effects may include wasteful, inefficient and unnecessary consumption of energy during the project construction, operation, maintenance and/ or removal that cannot be feasibly mitigated.
- G. Irreversible Commitment of Resources may include a discussion of how the project preempts future energy development or future energy conservation.
- H. Short-Term Gains versus Long-Term Impacts can be compared by calculating the energy costs over the lifetime of the project.
- Growth Inducing Effects may include the estimated energy consumption of growth induced by the project.

Press-Telegram.com

PRIDAY, SEPTEMBER 10, 2004

Health premium costs rise 11.2%

Survey: Insurance outpacing inflation 5-1; workers to pay more.

By Vanessa Maltin Cox News Service

WASHINGTON — Premiums for employer-sponsored health insurance rose at nearly five times the rate of inflation this year, the fourth consecutive year of double-digit increases, according to a survey released Thursday.

The annual study conducted by the Kaiser Family Foundation and the Health Research and Educational Trust showed that insurance premiums for coverage in 2004 increased an average of 11.2 percent, down slightly from last year's 13.9 percent.

This year's increase translates to nearly \$10,000 annually for family coverage, and more than \$3,500 annually for individual coverage. Typically, that cost is shared by the worker and the employer.

"The cost of family health insurance is rapidly approaching the gross earnings of a full-time minimum wage worker," said Drew Altman, president and chief executive officer of the Kaiser Family Foundation. "If these trends continue, workers and employers will find it increasingly difficult to pay for family health coverage, and every year the share of Americans who have employer-sponsored health coverage will fall."

The survey found that between 2001 and 2004, the number of firms offering health benefits to their employees dropped 5 percent, leaving an estimated 5 million workers without health care cover-

According to the study, nearly all firms with more than 200 employees offer health benefits, compared to 63 percent of smaller firms.

This year, businesses that offer insurance plans are being forced to

PLEASE SEE HEALTH / A7

HEALTH: Costs up 59% since 2000

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make cost-saving changes, including raising employee contributions— a change that more than half of large firms said they plan to make.

"Since 2000, the cost of health insurance has risen 59 percent. Over that period, employee contributions increased 57 percent for single coverage and 49 percent for family coverage, while workers' wages have increased only 12 percent," said Jon Gable, vice president for health studies at the Health Research and Education Trust. "This is why fewer small employers are offering coverage, and why fewer workers are taking up coverage."

Americans are worried about health care costs because on average, families paid \$1,000 more for coverage in 2004 then in 2000, Altman said.

"More than any other factor, these out-of-pocket cost increases are what's driving voter concern about health," he said.

The two private, nonprofit foundations conducted the survey between January and May 2004 among 3,017 randomly selected public and private firms with three or more employees.

Daily Breeze THURSDAY

September 9, 2004



S

L.A. basin surprises scientists. Particles are blamed rather than ozone pollution.

The project was started in 1993, following fourth-graders from across the region—including a Long Beach school—to search for chronic, long-term effects on all children from air pollution.

Lungs of youngsters who live in smoggy

By Lee Peterson DAILY BREEZE towns are five times more likely than clear-air peers to fail to fully develop, leaving them at a higher risk for heart and respiratory diseases later in life, according to an eight-year

"My belief was that if we found anything it would be really subtle, subclinical," said Dr. John Peters, one of the original architects of

study of Southern California schoolchildren

released Wednesday.

the study. "We had no idea we would find effects on the lungs this serious.
"It certainly seems ominous," Peters said.

Asked why one studied community in the Los Angeles basin would rank higher than another, lead researcher W. James Gauderman said the report couldn't answer that, but showed instead a basinwide effect from air pollution.

Also, the study did not specify the sources of the pollutants, as to whether they arose from the ports or freeways for example.

it For the five communities studied in the Los Dr. Angeles basin — four inland locales and Long of Beach — the study showed that it was not the

region's trademark ozone smog, but rather fine particles such as soot and dust, and other motor vehicle emissions that seemed to be creating the lung-stunting pollutants.

Long Beach children in the study from an unnamed school in that city had a 6 percent chance of their lungs not developing at least 80 percent of their potential breathing capacity, the threshold for determining lower lung function. Children in Upland in western San Bernardino County had a 10 percent

That's compared with a roughly 2 percent

SIMOG/A11

SIVIOG: Serious effects on lungs discovered

-ROIM PAGE A1

chance of underdeveloped lungs for children who grow up breathing the relatively clean air of Central Coast cities Lompoc and Santa Maria.

The study looked at children in 12 communities chosen for their varying levels of different pollutants, such as very-fine particles, ozone smog, nitrogen dioxide, acid vapors and elemental carbon.

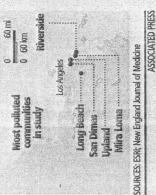
Pollutants most closely related to limited lung function were the fine particles, nitrogen dioxide and acid vapors, which stem from motor vehicles that burn fossil fuels.

Fine particles of less than 2.5 microns in diameter, about one-twentieth the size of a human hair, and these other pollutants tend to be spread across the region, rather than centered on inland cities like San Bernardino and Riverside, which bear the brunt of the larger particles and ozone smog.

The long-standing advice to avoid the short-term ill effects of ozone and larger particles—headaches and asthma attacks—has been to avoid exertion during the heat of the day, when the pollurants are in higher concentrations.

The pollutants that seem to be most linked to hindering lung growth, however, can be pres-

Lungs hurt
A study in Southern
California found that
children breathing the
diritiest air were more
likely to have less lung
capacity.



ent throughout the day in milder weather, so the best fix is to clean

"The only solution is to reduce pollution levels in a societal way," Gauderman said.

the air, Gauderman said.

Eighteen-year-olds with just under 80 percent of their expected lung function in most cases would be unlikely to feel it, since what they are lacking is unused reserves, Gauderman said.

However, the crux comes later in life as they become more susceptible to chronic conditions such as

emphysema, bronchitis and other pulmonary disease.

A strong link to lung cancer has not been established, Gauderman said.

The study started with 1,759 fourth-graders in the 12 communities in 1993, and gradually lost participants throughout the eight-year period as some moved away. It still wound up with more than half of the subjects. The subjects will be followed for five more years after high school, even if they move.

The Children's Health Study has spun off several side projects by researchers throughout the years, looking at the connection between smog and asthma for example, but the lung development issue was the main focus. The study's primary surprise is that it wasn't the ozone smog, a product of vehicle and smokestack emissions and sunlight, that was the biggest factor in long-term effects.

Penny Newman, executive director of the Center for Community Action and Environmental Justice, said she is alarmed at the results of the study, but not surprised.

"I think what is really frightening is that kids are only at 80 percent of where they should be, and we still don't know what that will mean," Newman said.

The study is in today's New Eng-

www.presstelegram.com

Long Beach, California

FRIDAY, SEPTEMBER 10, 2004

air regulations among the three

standards for Mexican, Canadian, U.S. ports. Pollution: Regulators want same emissions

By Eric Johnson

That was the major revelation on

and Canada.

Thursday, the first day of a two-day local ports' impact on air quality.

Staff writer

Coast emissions regulations that ulators are working on Pacific would level the playing field by ports in Mexico, the United States SAN PEDRO - Federal air regreducing air pollution from sea-

Diesel Collaborative to standardize

go headed to Los Angeles and Long Beach from being diverted elsenations. The idea is to prevent carwhere because of stricter emissions standards here.

les area exceeds federal standards for two major pollutants: nitrogen oxides (NOx) and diesel particulate matter (PMs). Both have been The air in the greater Los Angelinked to myriad health problems. Local ports are the biggest staconference at the Marina Hotel on Regulatory officials in Mexico, Canada and America this summer created the West Coast Clean

"We recognize the importance of tionary source of the two pollutants, air quality experts said.

Nastri, head of the local region of issues, everybody needs to step up to the plate, the whole industry." international trade," said Wayne the U.S. Environmental Protection Agency. "The realization is that as a major contributor to air-quality

Nastri said the collaborative's goal is to raise \$100 million each of the next five years to implement

more stringent standards across when approaching U.S., Mexican the Pacific Coast, including requiring cargo ships to use cleaner fuels and Canadian shores.

Ships registered in foreign countries are not subject to U.S. regulanations with heavy port activity tions, but starting in mid-2005, can enact clean-fuel zones along their coasts.

The collaborative's reach could extend to trains, trucks and cargo-

handling equipment within the te minal, Nastri said.

itime officials who spoke at the co cance of the port complex and i expected growth. The number containers headed for Long Bear Economic analysts and ma triple to 16 to 18 million containe ference noted the economic signi and Los Angeles is expected a year by 2020.

AIR: Collaborative effort is needed

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"By 2025, the population of the Los Angeles area will increase by 5 to 6 million people. That's the equivalent of moving the greater Chicago area to L.A.," said Greg Freeman, director of economic policy at the Los Angeles Economic Development Corp. "This region is our modern Ellis Island, and this conference is about how we're going to make trade livable and manageable."

Other highlights of the conference, sponsored by the maritime advocate Pacific Merchant Shipping Association, included:

 A good-natured war of words between the California Air Resources Board, which regulates air for the state, and the EPA over the legality of a proposal by the Port of Long Beach to force its marine terminals to reduce emissions by 2007.

 The release of a report by the Natural Resources Defense Council and the Coalition for Clean Air that suggests ports require cleaner ship fuels and cargo-handling equipment and power ships by electricity, rather than onboard diesel engines, while docked.

 A call by air-quality activists and Assemblyman Alan Lowenthal, D-Long Beach, for Gov. Schwarzenegger to sign Assembly Bill 2042, which would restrict future port growth if port air emissions exceed current levels.

The governor, who has not taken a public position, will decide on whether to sign the Lowenthalauthored bill by the end of Septem-

ber, a press aide said.

"We hear he's leaning toward vetoing it," said Todd Campbell, policy director for the Coalition for Clean Air. "That's discouraging, especially since the two cities most affected by this bill - Long Beach and Los Angeles - support it and it was passed by the Assembly and the state Senate."

Tariff in trouble?

Meanwhile, the Port of Long Beach's emission-reduction tariff, which would require every terminal to reduce current levels of NOx and particulate matter by 20 and 30 percent, respectively, by 2007,

The Long Beach Harbor Commission passed the tariff in June, but only contingent on it being approved by the state's Air Resources Board and EPA. In mid-August, the state agency's attorney kicked the tariff back to the port because she said the port didn't have jurisdiction.

That was news to EPA's Nastri.

"I don't think (EPA approval) is necessary for the port to implement the tariff," he said.

Catherine Witherspoon, executive officer for the Air Resources Board, added, "It's certainly not our intent to prevent anyone from cleaning the air at the port."

International rules

The EPA is also pushing the international body responsible for regulating international shipping for stricter emissions standards on

The International Maritime Organization, a U.N. agency based in London, will enact regulations on NOx emissions from large ocean vessels beginning in May 2005.

Those regulations are considered weak by air-quality activists and EPA officials. The United States has not ratified the regulations, but will be bound by them because 15 other IMO nations have already approved them.

"We consider the (IMO) standard insufficient in the long-term,' said Bryan Wood-Thomas, who is the EPA's international activities specialist. "It needs to be more stringent."

Amendments to the regulation will be considered in 2005, but Wood-Thomas said EPA will enact tougher standards for ships on its own if the international agency

We believe there can be a considerable leap," he said: "It's in the interest of the industry because further improvement will have to be made."

The conference continues today with discussion about what can be done within the ports.

On the Net www.nrdc.org From The Hospital Bed Of Mr. Edward Mora

A Four Year + Hospitalized Air Pollution Victim

Little Company of Mary Sub-Acute Hospital, Torrance

September 8, 2004

Long Beach City Clerk Long Beach City Mayor & Council 333 W. Ocean Blvd. Long Beach, California 90801

Re: Pier J Final EIR/EIS Approval By Port of Long Beach Harbor Commissioners

Su: Letter of Support of Appeal Of The Pier J Final EIR/EIS

Dear Long Beach Mayor & City Council Members:

I am a permanently hospitalized air pollution victim and I am submitting this letter to inform you that I support the appeal of the Port of Long Beach Harbor Commissioners approval of the Pier J Final EIR/EIS.

The Pier J Final EIR/EIS fails to mitigate all significant negative environmental and public health impacts as required by CEQA and NEPA. The Final EIR/EIS failed to incorporate the many public comments, recommendations and mitigation requests made during prior Pier J Public Hearings and during the Public Comment Periods to significantly reduce or eliminate the numerous negative environmental and public health impacts it is causing.

I have been in the hospital now with collapsed lungs for over four years and would die if I did not have an air ventilator and oxygen hooked up to me in order to breath 24 hrs. a day. I take numerous medications and often have to have emergency surgery. Two years ago I had a tracheotomy operation and my hospital bill now exceeds well over \$ 750,000. I can never go home again and I will probably never leave this hospital alive.

I have lived in Wilmington all my life, worked as a Accountant, have never smoked and never had any prior respiratory health problems. My neighbor is developing the same symptoms as mine and is currently using a portable ventilator. I have now heard that a 17 year girl from Wilmington is in the hospital for collapsed lungs.

Every year the air pollution is getting worse in Wilmington and in the Harbor. No one wants to take responsibility for the air pollution and no one is offering any solutions to significantly

reduce or eliminate air pollution. No one is helping us respiratory health problem victims financially. The Port of Long Beach must be held responsible for its business and their tenants business operations negative environmental and public health impacts on the communities in the San Pedro Bay. We need to have a moratorium on all Port expansion.

The South Coast Air Quality Management District (SCAQMD) published in its MATES II March 2000 report that Wilmington and Long Beach were rated number # 1 in the highest cancer risk due to diesel truck fuel emissions in South Los Angeles County. The SCAQMD has identified the Port of Long Beach as the # 2 largest air pollution source in Southern California.

I would like to request that the City of Long Beach City Council vote to conduct an "Independent & Thorough Review" of the Port of Long Beach Pier J Final EIR/EIS, supporting documentation, public comments and mitigation requests.

I want the Port of Long Beach Pier J Final EIR/EIS to be in 100% compliance to the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), all Federal and State Environmental Justice (EJ) Executive Orders, Guidelines, Requirements, Rules, Regulations and Laws, the Clean Water Act of 1972, Rivers & Waters Act of March 3, 1899 and Proposition 65.

I want a healthier and safer future for our communities children.

Sincerely,

Mr. Edward Mora 613 Gulf Ave.

Wilmington, California 90744

Eddie Mora

Long Beach City Clerk Long Beach Mayor & City Council 333 West Ocean Blvd. Long Beach, California 90801

Reference:

Port of Long Beach Harbor Commissioners Approved Pier J Final EIR/EIS

Subject:

Support of Appeal To Reject The POLB Harbor Commission Approved Final EIR/EIS

For Non-Compliance To CEQA/NEPA

Dear Mayor & City Council Members:

I am 55 years old and have lived in Wilmington all my life with my family. I live approximately 2 miles from the Port of Long Beach which borders Wilmington.

I support the Appeal of the decision by the Port of Long Beach Harbor Commissioners approving the Pier J Expansion Project Final Environmental Impact Report (EIR) because it does not comply with CEQA and NEPA. In addition, the Port of Long Beach did not hold a Public Hearing for the public to attend to voice our opinions on the Pier J Final EIR in the evening like it has always done in the past.

The Pier J Final EIR fails to mitigate all the significant negative environmental and public health impacts the Port of Long Beach is causing and will increase to Long Beach and neighboring communities residents and workers. Almost every family I know in Wilmington has someone ill with diabetes, have children Wilmington and West Long Beach are suffering from asthma and numerous other health problems. predominantly a Hispanic and ethnic minority communities which have the highest rates of asthma and respiratory health problems.

I believe that air pollution and my exposure to toxic chemicals from the Port of Long Beach daily business operations and continuous expansion projects is a significant contributor to my allergies, diabetes, difficulty breathing, headaches, dizziness, numerous days ill and lost days of work.

I was 48 years old when I was first diagnosed with diabetes and I am currently taking glybrite tablets every day and take blood sugar tests twice a day. I have read a newspaper story which describes a new medical study by a New York university which discovered a high correlation between people who have diabetes and communities with high levels of toxic air pollution.

The Port of Long Beach has been discriminating against our Hispanic Harbor and minority communities for decades by intentionally ignoring our requests for assistance and in completing complete and accurate I want Environmental and Social Justice Now!!!

The Port of Long Beach Pier J EIR does not even consider Wilmington an impacted community. willing to join any law suit against the Port of Long Beach or against the US Army Corps of Engineers if you fail to support an city council independent review of the POLB Pier J Final Environmental Impact Report for compliance to NEPA/CEQA, validate all information it contains and its failure to require mitigation for every significant negative environmental and health impact ours Harbor communities and public have identified.

I am submitting this letter to inform you that I support the public mitigation requests that the Port of Long Beach Pier J Final EIR include a Local Community Public Health Impact Study, Local Mortality Study to validate the Health Risk Assessment conclusions and a Morbidity Study of Long Beach, Wilmington, Carson and San Pedro to determine all the possible negative health impacts and causes of death we are experiencing and believe the Port of Long Beach is significantly responsible for.

My husband is currently a permanent medical patient at Little Company of Mary Sub-Acute Hospital in Torrance because his lungs have collapsed and he needs a ventilator machine and oxygen to keep breathing. He is rushed into emergency every few months and is getting worse. My husband worked as an accountant, was never a smoker and he never worked in any industrial environment where he could have gotten sick.

Every year the air pollution is getting worse in Wilmington and in the Harbor. No one wants to take responsibility for the air pollution and no one is offering any solution to significantly reduce or eliminate air pollution. I have read that the South Coast Air Quality Management District has identified the Port of Long Beach as the second largest source of air pollution in Southern California. The Port of Long Beach has never acknowledged to the public it is a public health hazard, exposes the public to cancer causing chemicals and toxic air pollution, nor has the City of Long Beach and Port of Long Beach ever offered to investigate our health problems or assist anyone financially with their health care costs.

I want the Port of Long Beach to establish an annual \$ 25 million Public Health Care Trust Fund and a \$ 25 million Environmental Clean-Up Trust Fund as requested during past Pier J Public Hearings and during the Public Comment Periods.

I want the port to incorporate the best available technologies to clean our polluted air, land and ocean water. I have already read that there are technologies available now to eliminate over 80% of all air pollution from diesel trucks, trains, ships and operating equipment. I want the Port to incorporate them in the Pier J Final EIS/EIR and Pier J Mitigation Plan.

I do not want the Port of Long Beach to use our public streets, highways, freeways or bridges as their private truck routes. I believe the Port of Long Beach should contribute \$ 500 million to expand the Alameda Corridor for Port of Long Beach truck lanes to be added and to electrify trains and/or 50% of the cost of construction for an underground tunnel for Port polluting trucks and trains transportation routes. I want the POLB to contribute \$ 25 million annually to Caltrans and \$ 10 million annually to the City of Long Beach, the City of Los Angeles and Carson for transportation infrastructure repair and maintenance.

Sincerely,

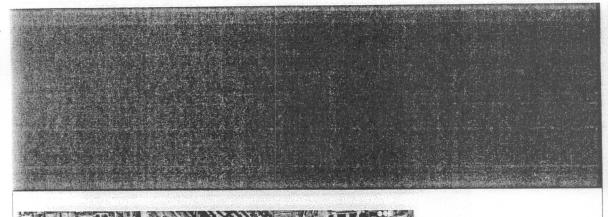
Mrs. Cecilia L. Mora

613 Gulf Ave.

Wilmington, California 90744

Julie L. Mola

310-834-2829

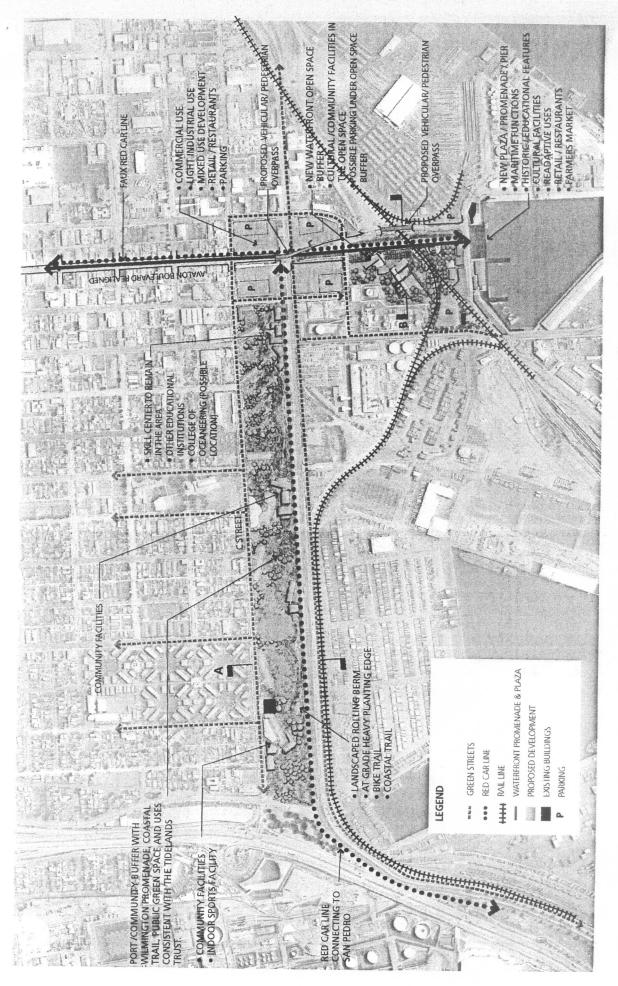




Wilmington Waterfront Development Plan

Port Community Advisory Committee (PCAC) City of Los Angeles Harbor Department





Wilmington Waterfront Development Plan - Preferred Community Alternative



Social & Environmental Report

2004

the earth is home

Environment-Friendly Ship Construction

Because of the difficulties in allocating these emissions, greenhouse gas emissions from greenhouse gas emissions from bunker fuels for international aviation and marine shipping are not included in the agreed targets of the Kyoto Protocol. Still, shipping companies work through the International Maritime Organization (IMO) to reduce such emissions. NYK has reduced CO₂ emissions by voluntarily reducing fuel consumption. Also, NYK carried out various activities prior to SO_x-and NO_x-related regulations set in the International Convention for the Prevention of Pollution from Ships (MARPOL).

IMO: A specialized agency of the United Nations that is responsible for measures to improve the safety of international shipping and to prevent marine pollution from ships. It also is involved in legal matters, including liability and compensation issues and the facilitation of international maritime traffic.

Cutting-Edge Ecoships

In the summer of 2004, NYK began operating car carriers employing cuttingedge environmental technologies. Called ecoships, these vessels' fuel consumption per loaded vehicle is approximately 7% less than conventional car carriers.

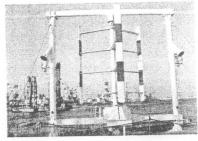
- Shipboard wind-turbine generators: NYK, in collaboration with Tokai University, Technova Corporation, and NIPPI Corporation, developed a straight-blade, vertical-axis, windturbine generator. NYK plans to install the generator on its ships on a trial basis with the aim of future practical use. Maximum power output is about 30kW (wind speed of 25m/sec.).
- Ship design for reducing wind resistance: NYK has worked with Kyushu University and other organizations to develop a ship design that can reduce wind resistance without lowering the vehicle-carrying capacity. In cases when a ship proceeds against a wind with a velocity of 10 meters per second, the new ship type can lower wind resistance by about 15% and consequently reduce fuel consumption by about 2%.
- Navigation-support system: This system assists the master in selecting the optimal route in heavy weather, thereby reducing fuel consumption.
- Solid ballast: The use of heavy concrete (specific gravity of 3.5) as ballast minimizes the
 transfer of harmful aquatic organisms and pathogens between areas by reducing the
 intake/discharge of seawater ballast. It also increases vessel stability, which allows more
 vehicles to be loaded on the upper deck, and in turn reduces CO₂ emissions per unit of
 cargo.

Electronically Controlled Engines

NYK is adopting an electronically controlled engine (the 8UEC60LSII-Eco, the first model of this type of engine developed by Mitsubishi Heavy Industries, Ltd.) on its new car carrier scheduled for commissioning in June 2005. Electronic control systems eliminate the need for camshafts; instead, they provide optimal timing for fuel injection and the opening/shutting of exhaust valves in all revolution zones, thus decreasing NO_x emissions by around 15%. In addition to reducing fuel consumption, electronically controlled engines improve combustion when engines are operating in the low-load range, thereby reducing the generation of soot/smoke.

Solar-Power Generation Equipment

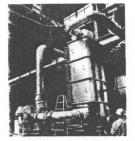
In December 2003, NYK started using solar-powered generation equipment on its ships on a trial bases. The equipment was connected to one ship's electric power systems, and data were compiled and analyzed. After determining the generator's power-generation capabilities and assessing its versatility and durability, NYK will consider installing them on its other ships.



Land test of wind-turbine generators



Solar-power generation equipment
Ship: Leto Providence
(LPG carrier with a capacity of 78.000m³)
Maximum output: 0.78kW
Physical volume: 16 panel modules
(710mm x 1.100mm per panel)
Panel area: Approx. 12m²



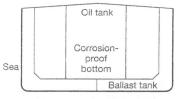
Smoke/soot removal device (in test operation at the manufacturing plant)

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Double	e-Hull	ing of	Crude	Oil C	arriers	
(%) (Number of ve						els)

Double-Hulling of Crude Oil Carriers (%) (Number of vessels 60 20 45 15 30 10 15 5

Proportion of doublehull vessels (left scale) Number of doublehull vessels (right scale)

Structure of Double-Hull Tanker and Bottom Coating



Structure of Double-Hull Fuel Oil Tank



Development of a Device Using Ceramic Filters for Soot/Smoke from Exhaust Gas, Resulting in Reduction

of Atmospheric Pollution Suspended in Exhaust Gases

NYK has been conducting research jointly with Daiwa Kogyo Co., Ltd., on a device for removing soot/smoke from exhaust gas, and developed a device using ceramic filters. This device can drastically reduce particulate matter contained in exhaust gas through the dust-collecting effect of such ceramic filters. NYK currently uses the device on a car carrier, and it is conducting performance tests to confirm durability, reliability, and maintainability with a view to commercialization.

Replacement of Chlorofluorocarbon (CFC) Refrigerants

Refrigerated containers use three types of refrigerants: CFC-12, HCFC-22, and HFC-134a, all replacements for CFC refrigerants. Currently, newly ordered refrigerated containers use HFC-134a, which does not harm the earth's ozone layer. As of March 31, 2004, NYK had reduced the percentage of its refrigerated containers that use CFC-12 to only 1%. The Company plans to complete the switch to HFC-134a during fiscal 2004.

NYK had already adopted HCFC-22 as the refrigerant used in its ships' air-conditioning and reefer systems. However, since February 2002, all newly ordered ships have been using R-404a, which has an ozone-depletion coefficient of zero.

Oil spills resulting from tankers stranding or suffering collisions cause great harm to the environment and ecosystems. In 1992, MARPOL was revised to require all newly constructed tankers to have double hulls. NYK is proactively shifting to double-hull tankers.

Shifting to Double-Hull Tankers to Prevent Harm to the Environment from Oil Spills

(1) Shift to double-hull tankers scheduled for completion in fiscal 2007

As of March 2004, NYK had 19 double-hull crude oil carriers, representing 61% of its crude oil carrier fleet. Although the remaining single-hull crude oil carriers are in good condition, NYK plans to achieve compliance ahead of the deadline by achieving a double-hull ratio of at least 80% in fiscal 2004 and 100% by fiscal 2007.

(2) Shifting to double-hull fuel oil tanks

At NYK, starting in 2005, not only will the oil compartments in very large crude oil carriers (VLCCs) be required to have double hulls, so will the fuel tanks, with a width of two meters between the inner wall of the fuel oil tank and the outside shell to reduce risks to the environment. As such, NYK intends to adopt the same structure for all new VLCCs built hereafter.

(3) Unique steel plate used to prevent corrosion of oil-cargo tank bottom

At NYK, the cargo tank bottom plates of double-hull crude oil carriers are coated to reduce the risk of corrosion and the development of holes. In June 2004, NYK started using the world's first anticorrosive steel plates, developed by Nippon Steel Corporation, for the cargo tank bottom on a VLCC that was built at the Nagasaki Shipyard & Machinery Works of Mitsubishi Heavy Industries, Ltd. These new anticorrosive steel plates can slow the progress of pitting (the phenomenon of corrosion occurring in tiny holes on metal surfaces) to about one-fifth of that which occurs in regular steel. Depending on their performance onboard, these anticorrosive steel plates have the potential to eliminate the need for coating, thereby going a long way toward lessening damage to the marine environment.

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Non-TBT Non-TBT surface TBT
Non-tributytim (TBT) ship: Defined as ships initially coated with paint that aces not contain TBT and ships that nave been recoated with a non-TBT paint after sandblasting. As of March 2004, non-TBT ships accounted for TBT of NMKs feet. The rate wais 97% including ships where only the first surface uses a non-TBT coating.

'97 '98 '99 '00 '01 '02 '03

Reducing Fuel Consumption through Use of Fuel Oil Homogenization Equipment Ships normally have fuel-oil-purifier equipment that works by centrifugal separation to remove incombustible particles before the fuel is supplied to the engine.

Previously, the removed particles were disposed of by burning as waste oil. Now, however, NYK has added fuel-oil-homogenization equipment to its proprietary fuel-pretreatment system, enabling the efficient use of more particles suspended in the fuel. NYK is expeditiously introducing the new equipment not only on new ships being constructed but also on its existing fleet as part of an effort to reduce the generation of waste oil and to cut fuel consumption.

Reducing SO_x Emissions through Use of Low-Sulfur Fuel

Standards for fuel sulfur content, which are tied to SO_x (sulfur oxides), are set forth in MARPOL and ISO standards. NYK mostly uses C-grade oil to meet its own internal standards for sulfur content, which is a maximum of 3.5% and stricter than those set under MARPOL and ISO.

For ships operating around Europe and the West Coast of North America, NYK uses A-grade oil or gas oil, which has a very low sulfur content of 0.2% or less, to curb SO_x emissions.

Measuring Engine NOx Emissions

NYK has started conducting ongoing trial measurements of the emission rate of NO $_{\rm X}$ (nitrogen oxides) from its ships, marking the world's first such trials by a private shipping company. NYK measures NO $_{\rm X}$ emission rates for both A-grade and C-grade marine fuel oil at every stage, in test operations at a manufacturing plant, on a trial at sea, and a test in service. NYK aims to use the data gained from these surveillance studies to verify the reliability of its NO $_{\rm X}$ detection system.

These tests are drawing worldwide attention as a means of establishing methods for continually monitoring engines for compliance with the NOx regulations for makers of marine engines and as a means for verifying the measuring equipment needed to comply with future regulations governing NOx emissions.

Study of Ways to Eliminate Emissions from Berthed Vessels

in November 2002, the city of Los Angeles in the United States launched a study aimed at the practical use of alternative maritime power (AMP). AMP involves the supply of shore-based electric power to vessels berthed in port, with the aim of eliminating the need for ships to run their electric power generation equipment, thereby eliminating pier-side ship emissions and reducing air pollution. Currently, Los Angeles is amassing technical know-how related to shore-based electric supply equipment in the Port of Los Angeles, ship-based equipment for receiving electricity, high-voltage cable connections, and methods for switching power sources from ship to shore to make the system operable on an as-needed basis.

Environment-Friendly Antifouling Ship Bottom Coatings

NYK coats the bottoms of its ships with antifouling paint to prevent bottom soiling, which causes greater water resistance. Conventional antifouling paints contain tributyltin (TBT) polymer, which is a very effective agent for preventing the adhesion of organic matter. However, when it dissolves in seawater, TBT acts as a hormone disrupter and causes other environmental problems. At an IMO diplomatic conference in October 2001, a convention was adopted that prohibits the new use of TBT coatings starting in January 2003 and obligates the complete elimination of TBT coatings or the covering of TBT coatings starting in January 2008.

NYK is aggressively switching to TBT-free coatings even before the convention goes into effect. Also, to eliminate TBT coatings, NYK is sandblasting ships that are judged to have bottoms in an unacceptable condition by ship-performance analysis, in conjunction with the aim of reducing fuel consumption.

Management of Ballast Water

When a vessel is in ballast condition, seawater, known as "ballast water," is taken on board and held in ballast tanks to enhance vessel stability, strength per unit area, and propeller efficiency during a voyage. Ballast water is taken on board when cargoes are unloaded at destination ports and discharged at ports of origin when the cargoes are loaded. Discharged ballast water typically contains aquatic organisms and pathogens that are not native to the location where released, and the potential impact on marine ecosystems has become an international concern. In February 2004, IMO adopted the International Convention for the Control and Management of Ship's Ballast Water and Sediments. In addition to complying with international conventions and national regulations, NYK is proactively developing a ballast-water-management system that meets international discharge standards. Currently, to avoid introducing foreign ballast water into other countries' territorial waters, NYK makes every reasonable effort to exchange ballast water at open sea.

Independent R&D on Ballast-Water-Management System

NYK conducts research on a ballast-water-management system with NYK Trading Corporation, SMAC Engineering Corp., and Masuda Research Inc. This management system uses a vessel's own steam to generate a shockwave of bubbles that sterilizes ballast water by physically destroying and reducing the number of aquatic organisms and pathogens. Also, antiseptic effectiveness is increased through the additional use of a modicum of ozone that generates a synergistic chemical antisepsis. Tests conducted in large-scale simulation chambers confirm a high degree of effectiveness for this equipment.

Ecosystem-Friendly, Marine-Growth Prevention System

Marine life adheres to seawater pipes used to cool equipment and to ship-bottom sea chests (saltwater intake hatches), impeding cooling effectiveness and causing blockages that could hamper ship operation. As such, various methods are used to inhibit the growth of marine life in such locations. One method is to inject a refined chloride compound derived through the electrolyzation of seawater into sea chest areas. Although not widely used, this method inhibits the growth of aquatic organisms by killing them. NYK is surveying and researching equipment that prevents the adhesion of marine life without killing it and plans to deploy this equipment as soon as possible.

Reducing Engine Room Bilge Emissions (Waste Oil)

Water- and oil-contaminated fluids generated by engine rooms are known as engine-room bilge. Under the terms of the MARPOL 73/78 International Convention for the Prevention of Pollution from Ships, engine-room discharge into the ocean is usually permitted only if the oil content in the bilge is reduced to a "discharge standard" concentration below 15ppm by a bilge separator (a system for separating bilge into oil and water content). NYK has gone beyond these regulatory norms. In 1996, we designed and developed the NYK Bilge Treatment System that reduces the amount of bilge generated in the engine room to an absolute minimum, greatly reducing discharges into the ocean. In addition to new ships that will be constructed, NYK is proactively deploying this system on its existing vessels, resulting in a substantial reduction in engine room bilge.

Ballast-Water Exchange at Sea

Ballast tenk

NYK makes every reasonable effort to exchange ballast water at open sea to avoid bringing aquatic organisms and pathogens into other countries' territorial waters.

Example of Marine-Growth Prevention System

(Picture of ship-bottom sea chest)



Adhesion of shellfish to saltwater intake pipe



Atter equipment use

No shelifish adhesior

Diagram of Bilge System

Conventional Bilge Treatment System

Engine room bilge

MARPOL 73/78 International Convention for the Prevention of Pollution from Ships Bilge separator

NYK Bilge Treatment System

Engine room bilge

NYK Bilge Treatment System

MARPOL 73/78 International Convention for the Prevention of Pollution from Ships Bilge separator

Significant reduction in bilge discharge

Significant reduction in discharge

Comparison of Bilge and Waste-Oil Generation on Container Ships

diters/day)