# Commercial Harbor Craft Regulation 15 day comment period

## San Francisco Bay Area Water Emergency Transportation Authority (WETA) Comments

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(5) *Selected New Ferries Only – Additional Requirements for All Newly Acquired Propulsion Engines.*

(A) ~~As of~~ Beginning January 1, 2009, ~~no~~ a person ~~shall~~ subject to this section may not sell, purchase, offer for sale, import, or otherwise acquire a new ferry with the capacity to transport 75 or more passengers for use in any of the Regulated California Waters unless each propulsion diesel engine on the vessel:

**WETA comment:** "75 or more passengers" is an arbitrary number that doesn't coincide with the typical US Code of Federal Regulations for ferries. Regulations based on passenger count are categorized as 46 CFR Subchapter T – (Less than 150 Passengers and less than 100 gross tons…); or, 46 CFR Subchapter K (more than 150 passengers and less than 100 gross tons…); etc. Suggest aligning proposed requirements with standard categories via the US Code of Federal Regulations.

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(5) *Selected New Ferries Only – Additional Requirements for All Newly Acquired Propulsion Engines.*

(A) ~~As of~~ Beginning January 1, 2009, ~~no~~ a person ~~shall~~ subject to this section may not sell, purchase, offer for sale, import, or otherwise acquire a new ferry with the capacity to transport 75 or more passengers for use in any of the Regulated California Waters unless each propulsion diesel engine on the vessel:

1. meets either the Tier 2 or Tier 3 standards that are in effect on the date of vessel acquisition; and

2. will be operated only in conjunction with the use of Best Available Control Technology (BACT), as determined and pre-approved by the ~~Executive Officer~~ E.O. pursuant to this provision.

**WETA comment:** The concept of the Best Available Control Technology (BACT) is of particular concern to the WETA due to numerous conflicts with Federal regulations governing procurement of vessels or engines when using federal aid for purchasing same. The specific concerns will be addressed within these comments.

1. Application Process.

   For all new ferries for which the keel is laid on or after January 1, 2009, the application for BACT approval ~~shall~~ must be submitted in writing to the E.O. for evaluation before the keel is laid. The BACT application ~~shall~~ must contain, at a minimum, the following information:

   a. the applicant company's name, address, and contact information;

   b. information specific to the harbor craft and engine(s) on which BACT will be used, including the vessel name and identification number(s); engine make, model, and serial numbers; and all other information that uniquely identify the engine;

   c. certification documentation, engineering calculations, emissions test data, or other information that establishes the diesel PM and $NO_x$ emissions of the engine in combination with the proposed BACT. Emissions and emission reduction estimates ~~shall~~ must include both diesel PM and $NO_x$ emissions and ~~shall~~ be expressed in grams per brake horsepower-hour (g/bhp-hr) unless otherwise specified by the E.O. Information submitted pursuant to this provision ~~shall~~ will be used as follows:

      i. The E.O. shall use the information to compare the emissions resulting from the proposed use of BACT with the emissions quantified in BACT determinations previously approved by the E.O.;
      ii. If there are no previous BACT determinations available for comparison, the E.O. shall use ARB staff's best engineering judgment to determine if the proposed BACT provides the greatest feasible reduction of diesel PM or NOx; and
      iii. The E.O. may require the applicant to submit additional emissions data for other air pollutants if the E.O. believes that the proposed use of BACT may increase any air pollutant by 10 percent or more relative to the engine emissions without the proposed BACT~~.~~; and

   d. the proposed recordkeeping, reporting, monitoring, and testing procedures that the applicant plans to use to demonstrate continued effectiveness of the BACT.

**WETA comment**: CARB's process for BACT is in direct conflict with federal procurement regulations. Let's start with the following passage from the Federal Transit Authority's Best Practices Procurement Manual:

> "One of the principles of contracting with Federal funds received directly or indirectly from FTA is a recognition that, as a condition of receiving the funds, certain specific Federal requirements must be met not only by the recipient of the funds (the grantee) but also by sub-recipients and a grantee's third party

contractors. The Federal requirements to be met by the grantee's third party contractors will be defined by the clauses included in the grantee's third party contracts….As the person responsible for procurement within your agency, you must be aware that compliance with Federal requirements is a condition of receipt of Federal funds. Failure to comply with these provisions may, in accordance with the terms of your Grant or Cooperative Agreement, be grounds for default of that agreement and result in the loss of the funds."

WETA does not wish to jeopardize federal funding for the new regional public ferry fleet for San Francisco Bay – which will be of utmost importance during man-made or natural disasters – due to proposed CARB regulations being in conflict with the guidelines as set forth from WETA's source of funding. WETA hopes to educate CARB as to the intricacies of this funding mechanism and the resultant vulnerabilities of CARB's proposed regulation as it relates to same.

a. Within 15 days after receiving a BACT application, the E.O. shall notify the applicant whether the application is deemed sufficiently complete to proceed with further evaluation. If the application is deemed incomplete, the notification ~~shall~~ must identify the application's deficiencies. The E.O. shall have an additional 15-day period for reviewing each set of documents or information submitted in response to an incomplete determination. Nothing in this subsection prohibits the E.O. from requesting additional information from the applicant, during any part of the BACT application process, which the E.O. determines is necessary to evaluate the application.

b. Within 30 days of deeming an application complete, the E.O. shall take final action to either approve or deny a BACT application, and the E.O. shall notify the applicant accordingly. If the application is denied or modified, the ~~Executive Officer~~ E.O. shall state the reasons for the denial or modification in the notification. The E.O. shall specify all terms, conditions, and requirements the E.O. believes are necessary for the ferry engine and BACT to operate properly and reduce emissions of air pollutants consistent with this section. The reporting and recordkeeping requirements specific to the use of BACT ~~shall~~ must include, ~~but not be limited to~~ at a minimum:

i. hours of operation for the engine and BACT and fuel usage;
ii. usage of any alternative fuels, additives, agents, flow rates, and emission test results;
iii. maintenance procedures for the engine(s) and its BACT; and
iv. any other measurements or recordings specified by the E.O.

The E.O. shall make ~~T~~the approval/disapproval notification to the applicant and identification of the approved/disapproved BACT ~~shall be made~~ available to the public on ARB's internet site.

3. Post-Approval Vessel, Engine, and BACT Operation.

~~Any~~ person subject to this provision ~~shall~~ must maintain operating records and other information in the manner and form specified by the E.O. in the BACT approval. The person must submit to ARB upon request ~~A~~all records and reports created pursuant to this provision, which must ~~shall be submitted to ARB upon request and shall~~ be maintained and retained for ARB inspection a minimum of three years after the records or reports were created.

**WETA comment on BACT:** For federal-aid procurement projects WETA must follow FTA Circular 4220.

CARB is placing proposed BACT procedures on WETA that do not accommodate FTA rules for funding vessel construction. For example:

1. FTA Circular 4220.1E, Paragraph 10:

   Provides that grantee must perform a cost or price analysis in connection with every procurement action, including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, grantees must make independent estimates before receiving bids or proposals.

WETA strongly feels that CARB's BACT procedures would interfere with the requirement above.

2. FTA Circular 4220, 1E, Paragraph 8

   Requires all procurements to be conducted in a manner providing full and open competition.

Since full and open competition is the guiding principle of procurement requirements and practices WETA cannot be overly selective in the procurement process. The primary purpose of full and open competition is to obtain the best quality and service at minimum cost. The secondary purpose are to guard against favoritism and profiteering at public expense, and to provide equal opportunities to participate in public business to every potential offeror. The referenced circular in paragraph 2 goes on to state:

> "All procurement transactions will be conducted in a manner providing full and open competition. Some of the situations considered to be restrictive of competition include but are not limited to…Specifying only a "brand name" product instead of allowing an "an equal" product to be offered without listing its salient characteristics."

Paragraph 8.c requires:

> "All solicitations shall:
>
> (1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procures. Such description shall not, in competitive procurements, contain features that unduly restrict competition…When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a 'brand name or equal' description may be used as a means to define the performance or other salient characteristics of a procurement. The specific features of the named brand which must be met by offerors shall be clearly stated."

Based on the FTA requirements above, WETA desires to demonstrate that CARB's proposed process for imposing the BACT on our ferries is in direct conflict with federal procurement regulations.

- Per federal regulations, WETA cannot specify a brand name engine; therefore, could not provide same to CARB for pre-approval prior to purchasing same
- Per federal regulations, WETA cannot specify a brand name BACT; therefore, could not provide same for CARB pre-approval prior to purchasing same

- Per federal regulations, WETA cannot limit competition

Consequently, WETA could not comply with CARB's proposed BACT procedures as currently stated. WETA suggests that CARB remove itself from the procurement process and, as an alternative, consider imposing a standard to meet CARB's emission reduction objectives. A standard may be easily incorporated into the procurement process and parallels federal procurement regulations at outlined below:

> "Plans, drawings, specifications or purchase descriptions should state only the minimum needs of the agency and describe the supplies in a manner which will encourage maximum competition, avoiding restrictive features which might restrict offers."

3. Another issue WETA discovered with CARB's proposed BACT procedures and the procurement process is confidentiality during a procurement evaluation process. Competitive information provided relative to both the technical and cost proposals may include trade secrets protected by statute. CARB's desire to thrust themselves into WETA's procurement process again poses challenges. Is CARB prepared to enter into confidentiality agreements? What if engine manufacturers or BACT providers prefer not to enter into an confidentiality agreement with CARB? CARB's proposed regulation would, in effect, restrict competition. Again, WETA suggests that as an alternative to the current proposed procedure, CARB consider imposing an emission reduction standard that would meet CARB's emission reduction objectives.
4. It is not unusual in the vessel procurement process to receive only one bid requiring WETA to prepare a sole source justification. This places a heavy burden on WETA to ensure that it is in the public interest and according to Federal requirements. Incorporating pre approvals from CARB into this process is not productive. WETA again suggests as an alternative to CARB's proposed BACT procedures that CARB imposes a standard to meet CARB's emission reduction objectives. This does not preclude CARB from pre-approving various BACT so that there would be options available – WETA supports a CARB effort to verify BACTs. WETA suggests that the procurement process would be cleaner if CARB removed themselves from same and as an alternative employ a standard that would meet CARB's emission reduction objectives.
5. It's interesting to note that CARB is thrusting itself into the procurement process – mandating that CARB preapprove BACTs; yet, CARB does not accept any responsibility or fiscal liability if the CARB approved BACT does not operate as envisioned.
6. CARB's proposed rule requires preapproval of the BACT; however, if utilizing Federal Aid in the procurement process WETA must follow Buy America regulations. Can CARB certify that their approval of BACT meets the Buy America federal requirement?
7. CARB's proposed BACT preapproval process challenges the federal procurement process due to the Cost and Price Analysis requirement as per paragraph 10 of FTA Circular 4220.1E which requires a cost or price analysis for every procurement action:

> "Grantees must perform a cost or price analysis in connection with every procurement action, including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular

procurement situation; but as a starting point, grantees must make independent estimates before receiving bids or proposals."

Again, WETA suggests that CARB remove themselves from the procurement process and establish a desired emission reduction standard. Does CARB really desire to be involved in public or private agency procurement processes for ferries? Involvement results in acceptance of implied responsibilities and liabilities. Would it be fair to say that CARB should focus on emission reduction standards as opposed to involvement in procurement practices of public and private entities as a best practice to achieve the common goal?

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(k) *Right of Entry.*

An agent or employee of the ~~Air Resources Board~~ ARB has the right of entry to board any harbor craft for the purpose of inspecting propulsion and auxiliary engines, emission control strategies, fuel systems and fuel storage; collecting fuel sample(s) not to exceed one liter per fuel tank; and acquiring and inspecting records required pursuant to this section.

**WETA comment on passage above:** right to entry should be subject to reasonable access provided with reasonable request to entry as schedules and safety considerations are a priority.

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## Appendix H

### Estimated Ticket Price Increase for Ferry/Excursion Businesses

Air Resources Board (ARB) staff estimated the ticket price increase for typical ferry and excursion vessel businesses assuming that the new equipment costs associated with compliance with the Commercial Harbor Craft Regulation are passed on to the passengers. The estimated new equipment costs associated with implementation of the regulation for these typical ferry and excursion boats are presented in this appendix along with the expected increase in ticket price.

New equipment costs are the estimated out-of-pocket costs for purchasing and installing a new engine (engine replacement cost), new ferry costs associated with adding after-treatment technology, recordkeeping, and reporting. The compliance costs for a ferry or excursion business will vary depending on the number and type of commercial harbor craft in their fleet and the compliance options chosen. Options include replacing the existing engine with a new engine, demonstrating that the existing engine meets the applicable emission limits, equipping the commercial harbor craft with a diesel emission control system, or implementing an alternative compliance plan that could include a combination of the above options. If engine replacement is chosen, a large portion of these costs are an existing cost of doing business that would occur with or without the regulation when an engine reaches the end of its service life. Engine replacement was assumed to be the chosen compliance option for this estimated ticket price increase analysis. This is the most expensive option and so represents a worst case.

The ticket price increase was estimated in two different ways. The first estimate was based on data obtained from the 2004 Statewide Commercial Harbor Craft Survey, documented in Appendix D. The other estimate was based on a hypothetical excursion company owning a single vessel and having to replace the propulsion and auxiliary engines at the same time. Based on these two estimates, the ticket price increase is expected to be between 5 to 10% of the annual sales.

**WETA comment on estimated ticket price increase for ferry/excursion businesses:**
The estimated ticket price increase calculation is an interesting method to demonstrate the cost to the consumer for a non-funded state mandate. By way of an actual example, WETA will demonstrate that CARB's estimate errors on the low side. It is important to note that WETA ferries, constructed to a 85% better than EPA Tier II (2007) standard are a method to reduce congestion and improve air quality; but, the increase in ticket prices tend to deter ridership; consequently, the air quality improvement benefits may be lost. State assistance to meet CARB's emission reduction goals is required in order for the concept to be successful. Unfunded state mandates are not productive and do not set up the ferry operators for success.
For the federally funded vessel construction project the cost of EPA Tier II engines (2 engines in a 199 passenger, 25-knot catamaran commuter ferry) and the associated emission reduction equipment (SCR) which may be considered BACT as the bench test results exceeded our emission mandate of better than EPA Tier II (2007) standards is

$1,367,633 of which $848,265 is for the engines and emission reduction equipment and the remaining amount is for engineering, testing, USCG approvals, exhaust stacks, etc. This is 17% of the total vessel construction cost in 2008 dollars. Consequently, to meet CARB's mandate for new ferries the capital cost alone for the propulsion system is 17% of the overall construction costs for one vessel. The operating costs increase as well due to use of the consumable, urea, for the exhaust emission reduction system (SCR) to function properly. For example, urea costs $1.85/USG and this ferry should utilize 1.98 USG/engine/operating hour based on the following cycle: 65% HS / 15%LS / 15% idle / 5% maneuver. Next, one must consider emission reduction equipment (SCR) catalyst replacement cycles, maintenance of the additional system, etc., and CARB's estimate of 5-10% just doesn't compute.

There is a real financial burden placed on ferry operators for this unfunded proposed CARB emission reduction mandate.

- WETA suggests that CARB re-evaluate their financial estimates
- WETA suggests that CARB reconsider key components of this proposed requirement such as the BACT processes and procedures as such procedures are in direct conflict with federal procurement regulations
- WETA suggests that CARB reconsider issuing restrictive time frames and advancing timeframes for ferries for compliance when CARB doesn't retain any responsibility or liability for CARB's actions. The financial burden could have disastrous results especially when there is a state-wide call to increase the number of ferries for emergency response. CARB's actions could potentially put ferry companies out of business.
- WETA suggests that CARB consider issuing an emission standard and allow industry to meet same as opposed to CARB pre-approving technology during an operator's procurement process.
- WETA suggests that CARB verify technologies offered by industry so that a "library" of options is available to operators thereby operators have confidence that the technology is CARB approved and viable with known costs for selection of same as operators move towards compliance. This comment does not imply that CARB should thrust themselves into the procurement process.

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(D) The E.O. shall determine the appropriate level of BACT and specify such BACT in an Executive Order granting such approval. Applications to comply

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**WETA comment:** WETA suggest that CARB consider issuing an emission standard and allow industry to meet same as opposed to CARB approving technology and without responsibility or liability placing the burden on the applicant for any failures as a result of employing CARB approved technology.

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1. Application Process.

For all new ferries for which the keel is laid on or after January 1, 2009, the application for BACT approval ~~shall~~ must be submitted in writing to the E.O. for evaluation before the keel is laid. The BACT application ~~shall~~ must contain, at a minimum, the following information:

a. the applicant company's name, address, and contact information;

b. information specific to the harbor craft and engine(s) on which BACT will be used, including the vessel name and identification number(s); engine make, model, and serial numbers; and all other information that uniquely identify the engine;

**WETA comments:** CARB requests information for the application process that generally isn't even available until advanced progress into vessel construction – not before the keel is laid. For example, WETA executed a contract for two ferries on 04 January 2007. The keel laying ceremony was held in July 2007, the vessels were named in May 2008 and the official number was received in June 2008. At contract execution WETA knew the engine make and model number; but, until the purchase was made (infringing on our procurement processes again) WETA would not know the serial numbers of the engines intended for the vessel. The serial numbers were known in December 2007 – twelve months after contract execution and six months after the keel was laid. Based on this recent experience WETA wouldn't be able to submit an application to CARB for BACT based on CARB's application process since WETA's application would be incomplete. Again, CARB's processes and procedures are not grounded in the reality of vessel construction. WETA suggests that CARB consider setting an emission standard that meets CARB's intended emission reduction goals as opposed to instituting the BACT processes and procedures which are not feasible or practical in our industry.

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i. The E.O. shall use the information to compare the emissions resulting from the proposed use of BACT with the emissions quantified in BACT determinations previously approved by the E.O.;
ii. If there are no previous BACT determinations available for comparison, the E.O. shall use ARB staff's best engineering judgment to determine if the proposed BACT provides the greatest feasible reduction of diesel PM or NOx; and
iii. The E.O. may require the applicant to submit additional emissions data for other air pollutants if the E.O. believes that the proposed use of BACT may increase any air pollutant by 10 percent or more relative to the engine emissions without the proposed BACT~~.~~; and

d. the proposed recordkeeping, reporting, monitoring, and testing procedures that the applicant plans to use to demonstrate continued effectiveness of the BACT.

**WETA Comments:** WETA is concerned about the highlighted section above whereby if there are no BACT determinations available for comparison, than the E.O. shall use ARB staff's best engineering judgment to determine if the proposed BACT provides the greatest feasible reduction of diesel PM or NOx. WETA's concern surrounds the fact that theory and practical application although through all appearances may be well suited – may in fact make for a rocky relationship. Many theoretical technologies meet all of CARB's desired emission reductions; however, the practical application of same in the "hostile marine environment" where vibration, shock, salt water, salt air, human error and basic modern marine mysteries can wreak havoc on sensitive BACT equipment. An operator in the Bay Area shouldered a lot of environmental responsibility and economic burdens to try an emission reduction system which potentially would be considered a BACT. The system was sound in theory; but, in practical application it could not be considered a success. It would not be fair for CARB to dictate that a proposed BACT would need additional technology to meet CARB's requirements based purely on sound engineering judgment with no practical experience. Again, CARB may dictate and would hold the authority to approve prior to a project moving forward; but, CARB would not have any responsibilities or economic liabilities if the project failed. Instead, CARB would impose a 90-day deadline for the operator to try another technology. This is not productive. WETA suggests that CARB institute an emission standard that meets CARB's emission reduction goals as opposed to dictating what technology CARB would accept with all consequences of failure falling on the operator.

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a. Within 15 days after receiving a BACT application, the E.O. shall notify the applicant whether the application is deemed sufficiently complete to proceed with further evaluation. If the application is deemed incomplete, the notification ~~shall~~ must identify the application's deficiencies. The E.O. shall have an additional 15-day period for reviewing each set of documents or information submitted in response to an incomplete determination. Nothing in this subsection prohibits the E.O. from requesting additional information from the applicant, during any part of the BACT application process, which the E.O. determines is necessary to evaluate the application.

b. Within 30 days of deeming an application complete, the E.O. shall take final action to either approve or deny a BACT application, and the E.O. shall notify the applicant accordingly. If the application is denied or modified, the ~~Executive Officer~~ E.O. shall state the reasons for the denial or modification in the notification. The E.O. shall specify all terms, conditions, and requirements the E.O. believes are necessary for the ferry engine and BACT to operate properly and reduce emissions of air pollutants consistent with this section. The reporting and recordkeeping requirements specific to the use of BACT ~~shall~~ must include, ~~but not be limited to~~ at a minimum:

**WETA comment:** The CARB proposed timetable is not grounded in the reality of vessel construction. Theory and practical application – opposite poles! In addition to the

problems presented for a federal-aid procurement process with this timeline, it doesn't work well with typical ferry vessel procurements. The grant process provides financing to WETA; however, if WETA doesn't utilize the grants they may be rescinded. It would be criminal for a public agency like WETA who is shouldering the responsibility of attempting to prove technology for the good of all the industry, would lose financing due to the intricacies of CARB's application process. CARB needs to extricate from the procurement process and focus on implementation and administering emission standards – which is CARB's basic mission.

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(F) *Special Provisions Applicable to the Use of a Diesel Emission Control Strategy (DECS), including Verified Diesel Emission Control Strategies (VDECS).*

The following requirements ~~specified in this paragraph shall~~ apply to any person's use of a DECS pursuant to subsections (e)(5) ~~and~~ or (e)(6) and are in addition to any other applicable requirements:

1. Once the DECS is installed or otherwise employed on a person's vessel, the ~~owner or operator~~ person ~~shall~~ must continue to operate and maintain the DECS, in accordance with the manufacturer's directions, to achieve the original level of emission reductions that the DECS was designed and intended to achieve;

2. In the event a DECS fails, breaks down, or is otherwise damaged ~~such that it cannot be repaired~~ (collectively referred to hereinafter as "fail" or "failure"), the vessel owner or operator ~~shall~~ must, within 90 days of the DECS failure, ~~either~~ do at least one of the following:

    a. repair the DECS to good working order;

    b. replace the failed DECS with another working DECS, if it cannot be repaired; or

    c. employ another method that meets the requirements of subsection (e)(6)(~~B~~C) and other applicable provisions of this section, if the DECS cannot be repaired.

**WETA comments:** Ouch! Does CARB realize the lead time on spare parts? If not repairable, replace the system – double ouch! Yes, WETA may increase fares for fuel costs, labor, and replacement of a failed – yet verified – DECS and drive the remaining passengers away! WETA comprehends the need to keep the DECS in good working order once installed; but suggests that CARB needs a more reasonable approach to insuring same. The goal is emission reduction – let's set up the regulation for success. We need to talk!

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