

**Website Upgrade Analysis**

**and**

**Proposed Action Items**

**A Living Document**

**CARBIS Steering Committee**  
**Revised December 24, 2007**

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## I. Executive Summary

Given the requirement to move to the California government's new look and feel and ADA compliant standards, it seemed the perfect time for an independent evaluation of our website/list serve/Really Simple Syndication (RSS) presence. The CARBIS Steering Committee issued a public survey, and we document below the identified problems and what specifically we can improve. **Red** means done; **blue** means the policy is in place, but the heavy lifting is still underway; black means we are in process or have not begun tackling the initiative.

1. **It is time for ARB to migrate its website to the new State portal look and feel. Status = Done.**
2. **ARB's search engine and navigation** generally are the biggest concerns of our stakeholders and there are many proposed action items. Some concerns are now resolved, some are in progress or in the queue; some are expensive; most are virtual freebies.
  - a. ARB is a regulatory department and our respondent's heaviest interest is in our laws and regulations and yet ARB is without a regulatory top page that navigates users to ARB's **current regulatory language**.
  - b. **We need one single location where all stakeholders can see what topics are open for public comment by ARB – current regulatory and non-reg. activity. OIS needs to expand its existing "Board item" docket system to accommodate informal or workshop comment situations and provide a centralized list of all "active," "inactive," and "archived" topic areas set up for stakeholder comment. Status = Done.**
  - c. Website users would like to be able to go to a **stakeholder's portal page** and from there, click on issues (or perhaps their line of work) that pertain to them or to the equipment they own and/or operate.
  - d. **ARB has gone with Google as its default search engine. We have drafted desk procedures for webpage authors to maximize Google search results and hope that these procedures will improve the results in all other public search engines. Status = Done.**
  - e. Reduce the verbiage and the number of pages all together with the use of **more "portal pages."** Navigate ARB's "power users" (60% of our public survey responders use our site more than twice per week) more quickly with more links on the top pages with little or no descriptive text. Look for these mini-site map (or "portal page") opportunities for ARB initiatives that cut across organizational lines ala last summer's "Diesel Activities" portal design: e.g., Climate Change, Test Methods, Mobile

Sources, Research Activities, etc.

- f. All documents (especially .pdfs) will **include one-up links** to the webpage upon which the document was originally linked. This essentially zero cost item will be extremely helpful to our website users.
  - g. Clearly **identify archive documents** from currently relevant materials.
  - h. Use RSS feeds to identify all documents that should be added into the **ARB Library Card Catalog**.
  - i. Provide a **more consistent look** to the website by the use and enforcement of templates. Also, enable program heads to control the content of the left-hand navigation bar. Finally, provide a standard format for linking the dozen generic document types found on our website: e.g., current regulations, test methods / test procedures, meetings, fact sheets/FAQs, contact us, etc. Status = Policy is in place with ARB's new design principles with thousands of pages to now be converted to the new customized left-hand nav bar.
  - j. Add some **short simple English summaries** before getting into the technical for the regulations themselves and also for the program descriptions. Some fans also encourage us to toot our horns a bit more.
  - k. Annually, review all webpages and even if no changes are made, **change the "This page last updated date"** so users will be confident that the page content is current as-of-when. Status = Policy on "This page last reviewed ..." is now in place with thousands of pages to be reviewed.
3. ARB's "anything goes" approach to webpage design needs to be tightened up to improve the visual presentation which in turn will improve navigation of the site and thereby enhance our stakeholder's website experience. Status = Design principles are now finalized.
  4. There is need for each division chief to formally assign a "**Division Webmaster**" to assist in the training / enforcement of the design principles. Status = Done.
  5. We ask for **one additional OIS position** to facilitate the migration to the new age templates including the training of webpage author staff.
  6. Modify subordinate templates to enable content positioning by Cascading Style Sheets (CSS) to improve ADA compliance.
  7. At a minimum, **we ask management to read Appendix H** which identifies proposed action items in each Division or Office.

## II. Background

Virtually all ARB business processes now involve an Internet presence. The California Air Resources Board Information System (CARBIS) has housed a huge percentage of ARB's work product for several years.\* Changes to this archive are then made known to stakeholders via a vast array of list serves\*\* which in turn populate ARB's new RSS News Feed and associated What's New archive. Finally, ARB staff complete "Web Services" transactions to make certain events are made known to our stakeholders via our CARBIS calendars and homepage.

The website is generally current, complete, and clean of broken links, typos, and other errors. The list serves appear to meet the needs of most of our system users. ARB succeeds in providing transparency / openness to its many constituencies by empowering its Branch Chiefs (as ARB's webpage/list serve "owners") and their respective cadres of webpage authors and list serve broadcasters. ARB's robust web content and web services are a testament to senior management's trust in its employees.

Since the Governor has asked all departments to migrate to an ADA compliant internet with a new look and feel, the CARBIS Steering Committee has chosen to take a fresh look at its Internet presence. When we poll CARBIS users, we find that the satisfaction numbers are satisfactory, but ARB can improve in each category surveyed.

## III. The Public Survey

The [public survey](#) ran for a month in March and April, 2007 and provides a snapshot of how we are doing and where we need to improve. The survey was linked from the ARBOutside homepage and in a footer to every public list serve broadcast for those five weeks. Most questions included a ranking of how we are doing and included a narrative comment area. The survey results have been linked from the ARBInside homepage in three deliverables and will remain linked under [CARBIS Admin](#):

1. A [preliminary draft](#) in April 2007.
2. The [survey results compilation](#) (including all comments), May, 2007.
3. This FINAL [Analysis / Proposed Action Items](#), October, 2007.

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\* The main web and FTP servers house over one-quarter million documents and this does not include the contents of any of the acronym'd servers known as: PERP, AQMIS, ADAM, EOS, VEDS, DMS, etc.

\*\* In 2007, ARB will send over three million list serve emails (approx. 75% of all outgoing ARB emails) in 1,400 email broadcasts, to over 150 public (non-closed) lists, serving over 100,000 unique email addresses.

This public survey covers the following major topic areas:

1. How often do you visit our site?
2. What types of information are you looking for?
3. How often are you able to locate what you need?
4. Is our website up-to-date?
5. Do you use our list serves?
6. Who are you (student, consultant, regulated business, etc.)?
7. Can you easily locate a person to contact?
8. How would you rate the following features of the website?
  - a. Navigation
  - b. Search engines
  - c. Visual presentation
  - d. Clarity
  - e. Completeness
  - f. Calendars and meeting information
  - g. Webcasts
9. Do you have specific suggestions to improve the site?
10. Which web browser do you use?
11. What's your modem access speed?
12. Would it be alright to contact you?

#### **IV. The Survey Results and Proposed Action Items**

##### **A. Quantitative Summary**

It is best that the reader go to the [Survey Results Compilation](#) to draw his/her own conclusions. But here is a quick look at some of the numbers:

- We received over 950 completed responses.
- 41% of respondents were regulated business professionals; 17% consultants; 10% considered themselves "citizens"
- 26% of our respondents visit the site daily or several times a day. 60% of our respondents go to the website at least "a couple of times a week."
- 81% use our list serve feature (Survey results are biased towards our list serve subscribers since we added a link to the survey in the footer of every list serve broadcast for the month).
- Laws and regulations are the most often sought information (72%) followed by publications/reports (54%); and meetings (53%).
- 79% said "Yes" when asked: "Are you able to easily locate a person to contact about information on our website?"
- Less than 7% of our respondents use dial-up to access our site.

How would you rate (by %) the following features on our website?

Features	Poor	Fair	Good	Very Good	Excellent	N/A
1. Navigation	8	22	34	28	8	0
2. Search Features	12	23	33	23	6	3
3. Visual Presentation	3	14	38	34	10	1
4. Clarity	4	16	33	35	11	1
5. Completeness	4	14	32	37	13	1
6. Calendars/Meetings	4	11	27	32	18	8
7. Webcasts	4	10	25	25	13	24

Given the above numbers, the committee’s initial focus is on the search engine and navigation.

**B. Qualitative Summary and Proposed Action Items**

So which is it?

“ARB’s website is the model for excellent bureaucratic notification and dissemination of information.” see Comment Q4 - #86 or two comments later: “Layout sucks! Laws rules and rulemakings are buried and inaccessible site design is horrible! Worst in state government” see Comment Q4 - #88. Or how about: “Worst and most difficult site I have ever used.” See Comment Q8a - #22 vs. “You do a great job with a LOT of information.” See Comment Q8d - #35. As the lady said, “There is no such thing as a true story.”

The range of positive and negative comments is interesting (even entertaining) but generally not that helpful when looking for what or how to fix.

In this “qualitative summary,” we summarize the comments received categorized by the above seven topics. The associated action items sometimes are drawn directly from user comments or from a synthesis of discussions during Steering Committee meetings. Because our intent is improvement in website/list serve/RSS services, we dwell on the negative comments.

The following analysis identifies the website attribute such as navigation vs. search, etc, and we list the various problems/concerns/wishes as potential initiatives raised by survey respondents or Steering Committee members. We list the question number and response number(s): e.g., Q4 - #88 is the eighty-eighth comment under question four, located in the [Survey Results Compilation](#). The following initiatives are grouped by items already addressed in the above executive summary followed by other findings.

The proposed action items or suggestions (in *bold and italics*) are not assignments for anyone but merely notes for Webmaster and the CARBIS Steering Committee on how we might proceed, if ever there is time to pursue any of these proposed initiatives. In most instances, webmaster will not be able to act at all given existing resources. **Webmaster will never act before discussing with Division management.** Webmaster will act with the assist or preferably in support of the proposed Division webmaster.

## 1. Question 8a. Navigation (it's easy to find what I'm looking for)

Although 81% of our respondents can find what they are looking for “Most of the time” or “Every time I visit,” when asked later in the survey, 30% gave us a “poor” or “fair” rating on “navigation.” Not good!

### “Navigation” Comments and Potential Action items:

1. **Overhaul our out-of-date regs.htm:** For the detailed proposals, see Appendix D; pp. 41-42.
  - A. “Would like to see all regulations in one place (i.e., on road and off road diesel) and then have the ability to split off from a main page.” See Comment Q9 - #2). See at least the following other comments: Q4 - #3, 25, 36, 54, 42, 52, 60, 65, 66, 69, 82, 88, 90, 141; Q8a - #19, 27, 44, 58, 69; Q8d - #24; Q9a - #10, 11, 23, 25, 28, 29, 41, 47, 52; Q9c - #51; Q9f - #3, 4; Q12e - #8, 10. *Overhaul our top webpage regs.htm to still provide the path to OAL's regulations website and explain how to navigate it. Secondly, provide a listing of all regulatory topic areas with a link to the associated programs' regulations page.*
  - B. “There is no place to get early notice of regulations staff are working on.” See for example Comments Q8e - #24; Q9e - #7. *Expand the existing Board Items docket system to include dockets for any regulatory or non-regulatory activity being undertaken by ARB staff. Displaying six dockets Formal vs. Informal and three groupings for each (“active” dockets,” inactive” dockets and “archived”) will enable website users to see everything under discussion at the Board and what discussion items have closed.*
  - C. “Clearly state the intent of the rules, laws, regulations, and enforcement information. Facility owners, testing companies, and even the different local agencies will not agree on the meaning of the regulations. Without the intent there is no consistent enforcement.” See Comment Q12c – #10. *Can we reasonably build these legislative digest-like summaries?*

2. **Stakeholders Portal Pages:** For the detailed proposal, see Appendix E; p. 43.

“Many of your construction trade still don’t even know how to turn their computers on. I can navigate ok but I think you should have a plumbing page, HVAC page, painter page... And only have thins related to them on that page.” See Comments Q8a - #56; and also Q8d - #5; Q9a - #4, 19; Q9c - #1; Q12b - #3, 13. ***Build a top page listing ARB’s stakeholder groups, and call it “Who are you? And populate it with portal (mini-site map) pages for each stakeholder group.***

3. **Mini-site maps or “portal pages:”**

“Site map or tree related to all agency GHG pages and which is primary. Not clear if CAT vs. climate portal vs. CARB is lead on certain subjects.” See Comment Q9a - #9. ***Build other mini-site maps a.k.a. “portal pages” of links to the various areas of CARBIS that deal with that subject: e.g., Climate Change, Research Activities, biodiesel, stationary engines, etc. This can mitigate the problems when a topic is covered by many branches throughout the department ala our 2006 “Diesel Activities” navigation enhancement initiative. It also navigates our power users to their desired location more quickly.***

4. **Archive materials:**

“I am never sure if what I find is the latest regulation of version that has been superseded.” See Comment Q4 - #47 and see also comments Q4 - #54, 58; Q8a - #94; Q9a - #1, 50; Q9f - #13. Or, “Original information is not annotated to inform users that it has been updated/corrected. If one is not on one of the list serves one never knows.” See Comment Q4 - #27. Or “...It’s also hard to find archived meeting info such as presentations from meetings that are past.” See Comments Q8f - #10. ***It is important that users know that something on our site has been superseded, hence the need for an “Archives” area to put documents that are no longer current.***

5. **One – up links:**

All documents (especially .pdfs) should include a reference to the URL upon which the document at hand is linked. See Comment Q8f - #8 wherein the respondent states: “It is often difficult to find board hearing information and almost impossible to find workshop information unless you already have a link.” ***If the workshop notice (linked from the inevitable list serve broadcast), simply included the one-up link to the URL of the page upon which that notice is linked then the problem disappears. This is a no-cost***

*item with potentially huge pay off in mitigating stakeholder frustration.*

**6. Consistency in webpage design:**

“Overall the CARB website is confusing and I think it is due to the visual presentation of the material.” See Comment Q8c - #13. Or, “There is no consistency between pages. It would be helpful if there were a standard format.” See Comment Q8c - #23. ***Implement a “Design Principles” Policies and Procedures document so that pages look more alike to make it easier for our users to find what they need on a webpage. Design principles will fall into four main categories: Administrative Issues; Aesthetics / Consistency; Search Engine Metatags; and ADA Principles and Best Practices.***

***Then, request each Division Chief to appoint a “Division Webmaster” responsible for enforcing the design principles.***

**Other initiatives that could be pursued with a possible initial action item *in bold and italics*:**

7. Cross link AFIP and ICAT. See Comment Q8a - #87. ***Talk to RD – Kevin Cleary to find out what AFIP means.***
8. To augment the stakeholders page listed above under item #2 could we even build individual mini-site map pages for various pieces of equipment (trucks, motorcycles, air cleaners, cars, small off road engines, gardening equipment, the 30 PERP pieces of equipment, but who would own these pages? See Comment Q8a - #63. Can we come up with a list of equipment page (and can we maintain it?) that links to the regulations that apply to that piece of equipment per Comment Q9a - #17, Q9c - #20? ***Talk to whom?***
9. Can we build a page that lists the air quality for the State in one place; or do we already have this? See Comment Q12c - #8. ***Talk to PTSD - Jeff Austin.***
10. Figure out what the “California I/M Program” is and make it easier to find. See Comment Q8a - #83. ***Can this be added to A-Z Index? James Goldstene says this has to do with smogcheck? If yes, what do we need to fix?***
11. On the A-Z Index, we need to be on the look out for alternative starting terms such as “On-road Heavy Duty Diesel,” and “Heavy Duty On-road Diesel,” etc. See Comment Q8a - #1, 16. Have all webpage authors go through all “subject top pages” (i.e., the top file in every subdirectory) and look for links that are not already found in A-Z. ***This is a phase 2 assignment for all webpage authors.***

12. On roster.htm, add a link to a document that delineates the roles and responsibilities between local air district vs. the ARB. See Comment Q8a - #27. ***Webmaster to talk to SSD – Mike Tollstrup.***
13. How to find emissions from a 2006 Nissan Frontier? See Comment Q8a - #14. Can we make this easier to find? ***John Swanton to characterize for the webmaster where this sits.***
14. Can ARB (webmaster or PIO) support a “ARB in the News” this week, last week, and in the near future at the ARB highlights to consolidate items currently located on What’s New, Webcasts, etc. or is this the new definition of the new “Highlights” area of the website underneath the “Information About” box?” ***Let’s see what the need is for this after we implement the new-age template “Highlights.”***
15. Add “Related Links” similar to those listed on the U.S. EPA website for climate change. ***Add this to the Design Principles document as a link to U.S. EPA’s webpage or suggest that a second or third column “Documents Area” standard link be called Related Links or add this to the standard content elements to the middle real estate of each subordinate webpage.***
16. “...Need better organization for consumer products regulations/meetings.” See Comments Q8a - #47, and also Q8a - #74; Q8c - #25. ***Talk to SSD – Marline Hicks..***
17. “I’m from Michigan and a new resident of California. I found the CARB website difficult to maneuver at first. Take a look at the MDEQs webpage <http://www.michigan.gov/deq/> . In my opinion, this website is very easy to find what you are looking for.” See Comment Q8a - #75 ***Webmaster to see why one user thinks this is a good site.***
18. 21% of respondents answered “No” to the question “Are you able to easily locate a person to contact about information on our website? ***As a result, we will force contact information by adding this field to the Phase 2 templates. This will become one of the emphasized elements of the new Design Principles.***
19. “Looking for engine emissions level standards customers have to meet for Ports and inter-model yards, and am having trouble finding the standards to meet.” See Comment Q8a - #6. ***Talk to whom?***
20. “You might set up a feedback system where users could submit an email when they have an item that is difficult to find. Certain trends may become evident of how people look for things.” See Comment Q9a - #5. ***This might be covered by A-Z Index shock absorber language or by getting a contact on all pages via the phase 2 template revision mandating a contact for all***

*pages. At this point they seem to be able to connect easily with [webmaster@arb.ca.gov](mailto:webmaster@arb.ca.gov), ARB's defacto switchboard liaison along with El Monte's helpline.*

21. "...Finding the quickest route to GDF information from the ARB main page is not self evident." See Comments Q9a - #16 and 22. *What is GDF and add to A-Z Index at a minimum?*
22. "Fast access to penalties and fines of all environmental types would be best. The stick is what gets the regulated community's attention not playing nice." See Comment Q9a - #32. *Query Enforcement Division as to whether this information exists, and is it on our Website and easily locatable?*
23. "Air Quality Planning should be added to the left side of the homepage for easy access...." See Comment Q9a - #33 *With the new age mouse over capability, this web area will be click-able from the homepage.*
24. Old RACT/BARCT Determinations that were published by CARB are now hard to find. It would be great if the web site had a complete collection of these in electronic form..." See Comment Q9a - #49. *Talk to SDD - and confirm we have a yellow pages contact for this.*
25. We need an "Easy to find and understand list of vehicle emission levels and comparison to EPA bin levels and easy look up for vehicle specific emission certification levels." See Comment Q9a - #53. *John Swanton?*
26. "Looking up engine executive orders is awful. I want to be able to confirm that retrofit devices work with engines. I should be able to do that thru a database." See Comment #Q9c - #21. *John Swanton / Duc Nguyen?*
27. "A simple page for AB32 implementation organized by subject. Each subject would then have links to published papers, webcasts, schedule of events, etc." See Comment Q9e - #8. *Climate Change is the reasonable place to design our next major portal area before the current 600 documents grows to 1,000. This process began with Chuck, James, Edie, Rich, Robert, and Ray June, 2007.*
28. "Why are fleet rules hidden in Carl Moyer Program? I found them here: <http://www.arbov/msprog/moyer/links.htm>. *Talk to Kathleen Mead to confirm that fleet owners can take advantage of Carl Moyer incentives and therefore this is not a problem. Merely an additional path to Carl Moyer.*
29. Can ARB come up with a single document providing the implementation timetable for all diesel-related rulemakings with links to the specific requirements? *Talk to whom?*

### **Other Initiatives already (or soon to be) completed for the Phase one upgrade:**

1. We have added an RSS news feed capability and use this to feed What's New. Providing a chronological archive of all listserv broadcasts, this makes What's New a comprehensive single location for all significant changes to the website and hence all significant actions on the part of ARB. See Comment Q9c - #34; Q12f - #1.
2. The new top tabs will reduce by one click the user's access to virtually the entire site. The current homepage has about 50 static links plus a bulletin board area of changeable items. The new one with its mouse-over feature will have over 150 static links plus a similar bulletin board area of changeable items. See Comments Q9d - #16, 18.
3. In June 2007, we added a "Publications Portal" webpage that links to all the major publication types and in turn is linked from the Resources area which means it will show up on the top 75+ webpages. Given that 54% of our users are looking for "Publications or Reports," this should be helpful. See Comment Q9a - #35.
4. We have fixed the one-up links on A-Z Index to do away with orphan pages with about 30 exceptions which will be fixed.
5. Each program area should have the ability immediately after Phase 1 to control the content of the left-hand navigation bar. This navigation bar will include up-links and local links.
6. "Most Popular Pages" area off the homepage will lead folks to aftermkt parts, PERP, Railyards, Carl Moyer, etc. See, for example, Comments Q8a - #34.
7. Stress to our users the utility of our A-Z Index by placing a link to the index at both the top and bottom of all new age subordinate template pages.
8. New improved "Data and Statistics" portal will replace aqe&m.htm.
9. PIO/Helpline/Webmaster to come up with the definitive ~ 4-page FAQ identifying the 10-20 most popular inquiries to Helpline and Webmaster and suggest that this be added to "Most Popular Pages." *John Swanton, do you already have this as a training aide for your new students?*
10. "Make specific areas for air quality professionals to make searches easier. Have a link to all the APCDs and AQMDs webpages." See Comment Q9a – 8. *A link to all district websites is found under "Links" and "Roster.htm"*

*both found under the current and new homepage. If this responder is asking that we comb through the local air district pages to provide cross links, I suspect we will always lack the resources to pull this off.*

11. To complete the discussion on “Navigation” issues, see also “Visual Presentation” item #1 as they are inextricably linked (see p. 19).

## **2. Question 8b. Search Features** (these yield the most relevant information quickly)

From a quantitative standpoint, this was perceived as the worst feature of the website with 35% rating us “Poor” or “Fair” vs. only 29% “Very Good” or “Excellent.” This is the one topic where the results were more negative than positive.

Unfortunately (or fortunately?), there is a problem with these numbers. We received several suggestions that we move to an alternative search engine (in all but one case, they recommend Google) as our default search engine when, in fact, we had already done this three weeks before putting out the survey. See at least the following Comments Q4 - # 7, 71, 133; Q8a - #7, 55; Q8b - #1, 2, 5, 7, 8, 10, 28, 30, 66, 71, 81 and 95; Q9b - #8, 24, 42, 48; Q9d - #12; and Q9h - #1.

### **“Search Engine” Comments and Other Potential Action Items:**

#### **1. Skip over the intermediary search page:**

The main page has a search field (above the Governor’s link) which takes you to another search field which is linked just above the search field. It’s redundant and you end up pressing ‘go’ twice.” See Comment Q8b - #23. See also Comments Q8a - #77, 10; Q8b - #23, 39, 45; Q9b - #2, 17, 18. *The search function was too convoluted in that the search options are many. The granularity we attempt to provide is of little use if users do not understand the offering. The ability to search individual areas of the archive: e.g., coatings vs. fuels vs. mobile sources, etc., should be treated as an “Advanced” search option with the immediate default being the Google search results of ARB’s entire archive. We have made all default searches go directly to Google search results with an “advanced” radio button going to our intermediary page.*

#### **2. Users get too many hits:**

“When doing a search you got 1000s of hits and there is no option to sort by most relevant or refine, etc.” See Comment Q8b - #21. Or, “I would add categories.” See Comment Q8b - #82. See also Q8b - #12, 15, 17, 21, 22, 34, 42, 43, 47, 57, 67, 85, 88, 90; Q9b - #1, 12, 22, 28, 32, 46; Q9f - #5. *Can we configure Google to build our individual root level index files and then we build a drop down menu for each and thereby replace Swish-e with Google in its entirety (see number 1 above).*

#### **3. Make sure all pages get into Google:**

“The search engine definitely needs revamping. I search for things that I know are on the site and they don’t come up in a search. This is my main

complaint.” See Comment Q9b - #23. *Identify the new rules for ARB’s search engine metatags for a policy / procedure document to be linked from carbis.htm so that all pdf files are in the Google index. Ita and Kate have volunteered to draft this desk procedure document. Division web masters will need to enforce CARBIS Steering Committee title tag and metatag policies for all PDF and HTML webpages.*

4. Divisions do not submit their reports to the ARB library. The ARB card catalog needs to be augmented with links to those documents linked from the new publications portal. *The library needs a division POC for gathering of hard copies when necessary. The hard copy of most of these documents do not need to reside in the library but records need to be added to the card catalog with keywords identified for each document and a link to each document pointing to its program areas on the website. With the now-complete What’s New webpage, ARB Library staff can track all new reports/publications and hence can build the required card catalog entry for each new report.*

**Other initiatives that could be pursued with a possible initial action item *in italics*:**

5. Users want the ability to search and only get subject top pages. See comments Q8b - #11, 14, 20, 44, 62. *Can we build an array each evening to include the top page of every directory and then index that array and make it available as an advanced option with the results reflected in Swish-e format?*
6. Add to the Events Calendar drop down a default to a long-ago prior year to make it obvious that we have already given our users the capability to search for past meetings. *Done.*
7. Search results not sorted chronologically. See Comment Q4 - #136.
8. “Index EOs for diesel engines and retrofits.” See Comment Q9a – #42.
9. “A search function that can find Executive Orders.” See Comment Q9c – #31.

### 3. Question 8c. Visual Presentation

ARB gets relatively good scores on this one with 44% rating the site “Very Good” or “Excellent” vs. 17% “Poor” or “Fair.”

ARB has the “Absolute worst of state websites! Very cluttered. Visually dead mostly puffery and self-promotion rather than info-rich content. Ugly. Ugly site.” See comment Q8c - #1. Or, see Comment Q8c - # 5 which reads: “I like the look. It does not have all kinds (of) unnecessary items on the pages.”

There are aesthetic issues that are clearly solely in the realm of visual presentation (such as clashing icons on the homepage see Comment Q8c - #21). Interestingly, the issues of navigation and visual presentation are difficult to separate. “The CARB website is huge and appears to be organized in an ad-hoc fashion. Different programs often organize their web content in different ways. I am an environmental professional so I can and am obliged to navigate my way through the maze I suspect.” Comment Q4 - #29. Or, “Overall the CARB website is confusing and I think it is due to the visual presentation of the material.” See Comment Q8c - #13.

#### “Visual Presentation” Comments and Potential Action Items:

1. “There is no consistency between pages. It would be helpful if there were a standard format.” See Comment Q8c - #23. See also Comments Q4 - #29; Q8c - #7, 9; and Q9d - #17. *Pages have an “inconsistent” look which is a navigation issue as well as a “visual presentation” concern and is the result of a lack of an up-to-date and enforced “design principles” document. This document will include a list of “Document Areas” that we’d like added to the left hand column. These will include: Meetings, Presentations, Fact Sheets, Current Regulation(s), etc.*
2. “The right hand banner is very busy.” See Comment Q8c - #21. See also Comments Q8c - #32, 37. *The homepage is certainly cluttered and we are told “ugly.” Certainly that is the consensus of the CARBIS Steering Committee much of which will be resolved with the new look. The new look includes only the mandated images: i.e., the Governor’s webpage icon, Amber Alert and Flex Your Power. If a senior staffer or Cal/EPA mandates yet another logo for the homepage, these will no longer be accepted willy-nilly by Webmaster or they will perhaps need to hang out with Amber and Flex. Instead these should be treated as “Popular Pages” or “Related Links.”*

#### Other initiatives that could be pursued with a possible initial action item *in italics*:

3. The left-hand navigation bar for the top level webpages (programs.htm, Events Calendar, etc.) will include the list of resources also found by default

on the homepage which is no change from the current situation. ***Once the ownership of a page moves to ARB's operating divisions (tier 3, 4 etc. pages), the Division chief will control the content of the left-hand navigation bar within the confines of a few rules identified in the design principles document.***

4. Too many clicks. See Comments Q8d - #2, 16; Q8e - #16; Q8f - #26; Q9a - #3; Q9b - #19. ***As a solution on this, see "Navigation" item #3 regarding portals.***
5. Too much scrolling. See Comments Q8c - #14, 16. ***Again, fewer words and more portal pages are needed.***
6. Learn what are the ADA concerns, if any, with our growing use of the "Go there" icon or "Click here." See Comment Q9d- #6. ***This issue needs to be resolved before Phase 2 and all ADA best practices are written up in clear English for web author's use in our design principles document.***
7. Use more photos. See Comments Q9c - #16; Q9d – #1, 2, 3, 7. ***This is a recommendation under our Design Principles document.***
8. "Slides for presentations are helpful but it would be good to include the notes that go along with the presentation." See Comments Q8c - #18 and see also Q8c - #4. ***This is a recommendation under our Design Principles document.***

#### 4. Question 8d. Clarity (easy to understand)

ARB did OK on this item with 46% giving us “Very Good” or “Excellent” marks vs. 20% grading us “Poor” or “Fair.”

##### “Clarity” Comments and Potential Action Items:

1. “I wish you guys would develop a layman’s summary of some of these things (regs.)” See Comment Q8b - #7. See also Comments Q8d - #10, 14; Q8f - #15; Q9c - # 13, 18; Q9c - #33, 35, 46, 47; Q12b - #16. *Add some summarized information on regulations for quick reference.*
2. “Would like to read a few pages not a novel. Most do not have the time to read page after page. Please simplify.” See Comment Q4 - #135. See also Comments Q4 - #94; Q8b - #60; Q8c - #11, 29. *The website is too wordy which again can be mitigated with several portal pages at the top of the site such as all or nearly all root level directory top pages.*

##### Other initiatives that could be pursued with a possible initial action item *in italics*:

3. The DMS is difficult to use; can it be more user friendly?” See Comment Q9c - #12; Q12b - #6. *Talk to Yvonne Guzman-Cicero?*
4. “Not too many issues on infrastructure development for RE distribution at retail level.” Comment Q4 - #26) (huh?) *Who knows what this means? Can we get back to this responder and find out what we can do to fix this?*
5. “For instance with the ZEV program can you please post something on your site that says where the program started and where it is now? Could you provide some easy guide to the current ZEV regulations? A Timeline? Something?” See Comments Q8d - #4. *Talk to Analisa Bevan.*
6. Don’t be vague (see Comment Q8d - #26) or obfuscate (see Comments Q8d - #19, 14, 25, 29, 32, 33; Q9a - #18; Q9c - #1, 2, 6, 9, 10, 11, 14; Q12b - #18. *Added this to Design Principles.*
7. “The fact Sheets, Brochures, and Videos page is really cumbersome. It’s kind of a clearinghouse for too much stuff. Needs to be more program oriented.” See Comment Q9c - #5. *Webmaster to get back to this responder if possible and see what specifically can be done to improve this area.*
8. “Make the site more user friendly for manufacturers outside of California. More charts pictures. Simplify certification paperwork. It gets more confusing every year.” See Comment Q9c - #16. *Talk to whom?*

9. “Put a summary together for mobile equipment like forklifts on the cargo / ports / intermodal yards rules and regs. and a timetable for when what action is supposed to have taken place.” See Comment Q9c - #20. ***Talk to whom?***
10. “Explain the VOC enforcement process. Explain the process by which a manufacturer can make sure their VOC is compliant.” See Comment Q9c - #22. ***Talk to Steve Giorgi.***
11. “A better guide for EMFAC and OFFROAD.” See Comment Q9c - #40. ***Talk to Todd Sax?***
12. “When I receive emails they appear busy. A better format would be a simple summary of the core of the message with supporting detail to follow.” See Comment Q9i - #3. ***Hopefully this will be resolved now that we are using list serve broadcasts for the RSS feed and What’s New archive and broadcasters will be more sensitive to the lead sentence in the message area.***
13. “I have had some difficulty using the certified engine database especially when searching by family name.” See Comment Q12b - #20. ***Talk to whom?***
14. Update ARB’s glossary: ***(1) All acronyms used in this survey should be considered for inclusion into ARB’s glossary: .e.g., GDF, RE, BEVs, PHEVs, RSS, California I/M program, DMS, etc. (2) ARB’s erudition could be mitigated by linking its technical terms and acronyms to the glossary as the glossary was built with anchors for this purpose. (3) We could consider the glossary (soon to be linked off ARB’s homepage in the “Education area off the new homepage, to be yet another portal into the public website. We will put out an appeal during phase 2 for webpage authors***
15. “Air Quality Standards chart used to be html now it is pdf and not clear to read.” See Comment Q8g - #58. ***RD’s Steve Mara to take a look at this?***

## 5. Complete and Accurate Information

### **Question 8e. Complete (covers most aspects of the topic you're interested in) and Question 4 "Do you feel confident that the information you do find is up-to-date and accurate?"**

For Question 4, 85% feel information is up-to-date and 15% said "no."

For "completeness" in Question 8e, 50% of respondents call this one "Very Good" or "Excellent" while 18% call it "Poor" or "Fair." The range of comments includes: "If there were more info on that site it would die of its own weight." See Comment Q8e - #8 vs. "More technical information would be good." See Comment Q8e - #13.

#### **"Complete" Comments and Potential Action Items:**

1. "I do not feel confident that the document I found is the latest one on the topic published on the website." See Comment 4Q - #79. See also Comments Q4 - #108, 128; Q8a - #62; Q9f - #2, 14. *We need to make very clear what are the current marching orders for our users. This concern mimics the discussion above under Navigation Comments #4 regarding the clear notation of archival materials.*

Users would feel more confident of completeness if they felt they could rely on the "last updated" date. See Comments Q4 - #1, 2, 8, 10. *The Committee advocates a change in our long-held page dating policy such that any time the page is reviewed by the owner or his/her designee and is found to be current, the date will then be updated. A sample tag line is "This page last reviewed June 17, 2007."*

#### **Other initiatives that could be pursued with a possible initial action item *in italics*:**

2. We need to update our 2001 strategic plan. See Comment Q4 - #19. *Talk to PTSD's Kurt Karperos.*
3. Is there a "small lag" in getting OAL approved materials on our site forcing users to go directly to OAL for current regulations? See Comment Q4 - #5. *Talk to BARCU's Alexa Malik.*
4. Climate Change Pavley Bill rules (see Comment Q4 - #114) and technical group late postings? See Comment Q4 - #70. See also Climate Change Comment Q8d - #23. *Talk to OCC's Rich Varenchik.*
5. "Some of the information specifically the fact sheets seem to be rather old." Comment Q4 - #72. See also Comment Q4 - #48 for small engines. *Talk to*

*PIO's Genny Paauwe / John Swanton.*

6. Compliance Training course information is out of date? See Comment #Q4 - #89. *Talk to ED's Dave Kemena.*
7. Bike to Work Week website not updated in two years? See Comment Q4 - #91. *Remove this website area as Marie Schelling is no longer available to support this feature?*
8. "I know that there are errors in the algorithms used to compute federal and state exceedance values. Plus important air quality monitoring sites are missing." See Comment Q4 - 97. *Talk to PTSD's Karen Magliano?*
9. Is ARB's attainment status information up-to-date? See Comment Q4 - #107. *Talk to PTSD's Karen Magliano?*
10. Post the UCI study on cardiovascular effects in people. See Comment Q4 - #109. *Talk to RD's Steve Mara.*
11. "There should be an accessible historic (1990 to present) data base of the emission results (each type CO, NOX, etc) from each engine type (or device i.e., conversion kit) that you have tested and certified so we can do our own emission calculations for." See Comment Q4 - #118. *Talk to PIO's John Swanton.*
12. "It's very hard to find ARB guidelines on the web Esp. for regional offices." See Comment Q4 - #120. *Talk to whom?*
13. "I have found organization charts to be outdated." See Comment Q4 - #121. *Talk to ASD's Staci Cain, but note that she is unable to make changes until all paperwork is final.*
14. "Exception: cost estimates for compliance are artificially low. Why?????" See Comment Q4 - #123. *A bit vague to know whom to contact.*
15. "I would include information about the pre-conversion right (see [http://en.wikipedia.org/wiki/Electric\\_vehicle\\_conversion](http://en.wikipedia.org/wiki/Electric_vehicle_conversion)) and baset trailers ([http://en.wikipedia.org/wile/Baset\\_trailer](http://en.wikipedia.org/wile/Baset_trailer))." See Comment Q4 - #132 and Q12c - #2. *Talk to whom?*
16. "Can't find anything that directly pertains to Diesel to Natural Gas retrofitting of existing in service off-road engines." See Comment Q4 - #139. *Talk to whom?*
17. "I am looking at biodiesel information and government actions-taxation leanings so every bit is golden." See Comment Q4 - #155. *Talk to SSD's*

*Gary Yee.*

18. “Local rules vs. state? PERP vs. local?” See Comment Q8e - #9. *Talk to SSD’s Mike Guzzetta.*
19. “Looking for a history of emissions regulations by vehicle class / weight was impossible. I expected to be able to pull it up in minutes.” See Comment Q8e- #10. *Talk to PIO’s John Swanton.*
20. “Some pages like ATCMs are out of date.” See Comment Q8e - #19. *Talk to SSD’s Dan Donohue.*
21. “Still looking and time is money. If I miss a single requirement in the preliminary design it could cost millions to retool and recertify parts or systems later on. The regulators seem oblivious to this system design aspect and approach things piecemeal.” See Comment Q8e - #22. *Could not contact this person as too vague to respond to given the volume of ARB certification programs.*
22. “Would be nice to see some demographic information or links to it.” See Comment Q8e - #25. *Talk to whom?*
23. “Would like better written information about VOC calculations and rules for consumer products. It leaves a lot to interpretation.” See Comment Q8e - #26. *Talk to SSD’s Janette Brooks.*
24. “Make it possible to figure out when staff meetings are happening on specific subjects. Have some sort of cross-reference available to find what Board meetings are relevant to particular subjects. Have links to all studies that relate to any particular subject.” See Comment Q9c - #39. *Talk to BARCU’s Alexa Malik.*
25. “Status reports for AVR II and ISD systems in test application for review. The industry needs to know what to expect we don’t need manufacturers or such just the basic information on how many systems and at what stage.” See Comment Q9c – #42. *What is this?*
26. “A calendar. I deal with consumer products. I want to know the exact date all information needs to be into the Board. When regulations are due, when they are implementing the changes, if changes have been postponed, etc. I always think something is due.” See Comment Q9c - #50. *Talk to SSD’s Janette Brooks.*
27. “Research links on retrofit alternatives for diesel exhaust treatment.” See Comment Q9d - #20. *huh?*

28. “Allow people with personal experiences with alternative fuel vehicles to write about their experiences kind of like Amazon.com lets people enter reviews of products.” See Comment Q9e - #1.
29. “I want to learn more about plans for a hydrogen economy.” See Comment Q9e - #9. *Talk to MSCD’s Melissa Meuser.*
30. “I think you need more environmental technology information and its regulations.” See Comment Q9e - #10.
31. “Fact sheet and/or history page. You have a history of when laws were enacted but not the consequences of those laws.” See Comment Q9e - #12. *Talk to PIO’s Genny Pauuwe / Sue Wyman.*
32. “Impacts of new regulations on environmental documents especially thresholds of significance.” See Comment Q9e - #13. *Talk to PIO.*
33. “Make more older (pre-web era) documents available online.” See Comment Q9e - #14. *This functionality is available but up to webpage owners as to what effort they are able to put into this kind of request.*
34. “I’d like to be able to see more information from the Bureau of Automotive Repair on their Automotive Emissions Inspection and Maintenance program.” See Comment Q9e - #16. *We will have a link to the new Homepage “Related Links” to BAR’s smog check program.*
35. “Cannot find any support for retail level infrastructure support for RE or funding for bio-fuels. If this is not addressed then what is the use of spending billions on research without considering ultimate consumer distribution....” See Comment Q9e - #17. *Talk to SSD’s Dean Simeroth.*
36. “Would like more info on results of testing new fuels will be implemented to start reducing harmful emissions. It almost looks like some at CARB are trying to stonewall progress with more meetings and no action....” See Comment Q9e - #18. *Talk to SSD’s Dean Simeroth.*
37. “Would be very interested in numbers of vehicles and systems that land on the streets of California. How about how effective certain legislations and programs are in getting the technologies to the people?” See Comment Q9e - #20. *Talk to Genny Paauwe of PIO.*
38. “Add updated PM2.5 data....” See Comment Q9f - #5. *Talk to PTSD’s Patricia Velasco.*

39. “Need better EDI for permits logs & online inspectors.” See Comments Q12b - #15. *Is this PERP-related; talk to Mike Guzzetta?*
40. “For Vapor Recovery Approval letters and Executive Orders, I recommend including all letters. I am aware of approval letters as well as AST Executive Orders that are ARB approved but not on the website.” See Comment Q12c - #5. *Talk to MLD’s Oscar Lopez.*
41. “Fact Sheets should contain more info about compliance requirements. Most have only general info. Example – Portable engine fact sheets don’t mention dates of fleet avg. targets.” See Comment Q12c - #7. *Talk to SSD’s Mike Guzzetta.*
42. “Summary of Board actions the day after a hearing would be great....” See Comment Q12c - #16. *This has come up before in ARB’s virtual brown bag and is easily accomplished with a set of codes for each possible Board action. Can BARCU put this out for us?*
43. “How about adding to What’s New regulations just posted?” See Comment Q12c - #17. *This would merely require a list serve posting to the “Board” and to the comment list that OAL has approved the rulemaking. Is there a timing issue that we are thinking might cause confusion for our stakeholders. Talk to BARCU’s Alexa Malik.*

## 6. Question 8f. Calendars and meeting information is easy to find

Again, 50% say “Very Good” or “Excellent” while 15% consider us “Poor” or “Fair” on this feature. “Completeness” and our “Calendars and meeting information” documentation received the most favorable reviews and provoked the fewest comments.

### “Calendars and Meeting Information” Comments and Potential Action Items:

1. “I am often disappointed that the scheduled hearings/meetings are not distant enough for me to schedule and attend and not much going on in the San Diego area?” Comment Q4 - #44. See also Comments Q4 - #30, 130; Q8f - #30; Q9c - #41, 48. *We don’t always post meetings timely.*
2. “Primarily trying to watch climate related work particularly related to energy issues. Because things are split b/w CARB and CPUC/CEC it’s confusing. It would be nice if the CARB calendar covered all of the workshops and meetings on the topic irrespective.” See Comment Q4 - #122. *This is now done. We just need the Office of Climate Change to start populating this new calendar.*
3. “I attended a class on vapor recovery at the LA facility and one in Sacramento since then, but finding out about them has been a real problem.” See Comment Q8f - #4. *Query to Mary Boyer: Should all training classes be added to our Events Calendar?*
4. “It is only easy to find once I am on the webpage for the specific topic for the meeting. It would be nice to have one central location that listed all the meetings and public workshops.” See Comment Q8f - #9 and also Comment Q8f - #21. *Note: the CARBIS Events Calendar is this place but people perhaps do not realize they can search for all meetings or all workshops for a period including the current year plus two prior years.*
5. “Meeting presentations only available at last minute.” See Comment Q8f – 12. *That is the nature of these presentations as they are finalized last minute sometimes.*

## 7. Questions 8g. Webcasts

We get favorable ratings by 38% of the respondents who answered this one with 14% calling our efforts “Poor” or “Fair.” A large 24% voted “Not applicable.” We received many comments on this feature ranging from; “From someone who watches them all the time. Could be much better.” See Comment Q8g - #9 vs. Comment Q8g - #11 which reads: “Off-the-charts! The greatest thing since sliced bread!”

### “Webcast” Comments and Potential Action Items:

1. “I can’t get the webcast to work. It is likely the settings that our information tech department has for defaults. It is very restrictive here.” See Comment Q8g - #13. See also Comments Q8g - #20, 39, 73, and 78. *Some stakeholders can’t get our broadcasts due to firewalls, etc. For those companies whose firewall blocks our broadcasts is there a short document that we can write that could mitigate this inconvenience for our stakeholders who want to get to our webcasts?*
2. “Our agency’s TV specialist just spent two months converting DVDs of a three day seminar into .wmv files so that we can make them available on our website. This because the A/V staff don’t automatically capture streaming video from the presentations because...” See Comment Q9h - #4. *Get Thomas Properties to build the .WMV file in real time with Steve Mara’s/Harlan’s/Fred’s help starting with seminars.*
3. “Once I was listening to a webcast and wanted the presentation link. It was not provided on the page used to view the webcast but on a different one...” See Comment Q8f - #18. *What is the obstacle for keeping the link to the presentations on the screen as much as possible? Mix this with the screen notice of how to interact with the meeting.*
4. Is there anything we can do about sound quality and in particular audience? See Comments Q8g - #24, 47, 50, 67. *One specific sound quality issue would include instruction to viewers that they need to mute their phone (See Comment Q8g - #46).*
5. Is there anything we can do about the video quality / slide quality? See Comments Q8g - #1, 2, 7, 10, 16, 17, 29, 40, 53, 55, 56, 71 and 76.
6. Is there anything we can do about the delay or cutting out? See Comments Q8g - #3, 8, 21, 37, 44, 51, 52; Q12d - #4; Q12h - #2.

7. Some people would like ARB to archive its webcasts. See Comments Q4 - #63; Q8e - #27; Q8g - #6, 15, 37, 43, 60, 70, 72, 74. 75; Q12h - #1. And why don't we chapter them and match the video to an outline. See Comment #Q8g - #5. ***ARB's Office of Legal Affairs is fine with archiving non-workshop and non-Board meetings for which there are no alternative business processes in place to document these proceedings.***

## **8. No Particular Questions: Other Proposed Initiatives/Applications:**

1. When leaving CARBIS, open another browser window. See Comment Q8a - #61. *This has been added to the Design Principles document.*
2. “Make it more accessible to individuals with disabilities. Too many embedded tables.” See Comment Q9c - #17. *This will be remedied in Phase 2 as we move to CSS for positioning.*
3. “...On-line registrations for PERP and tracking on-line of where the registration is in the process.” See Comment Q9c - #25. *Talk to SSD’s Mike Guzzetta.*
4. A database of equipment, horsepower ratings for the new off-road regulations. Online or downloadable spreadsheets for g/bhp/hp conversions, etc.” See Comment Q9c - #26. *Talk to whom?*
5. “General public to be able to view the site that is set up for local air districts to check on current PERP registrations would allow business to see if our competition had their engines registered.” See Comment Q9c - #30. *Talk to SSD’s Mike Guzzetta.*
6. Make downloading of bulk air quality data consistent across the site. Download should be user friendly.” See Comment Q9c - #32. *Talk to PTSD’s Jeff Austin.*
7. “Add a way to download meeting details and add to Outlook or other calendar software.” See Comment Q9c - #43. *Talk to OIS’s Vida Gaston.*
8. “On homepage you may add links to more important topics in different languages for foreign users.” See Comment Q9c - #49. *Talk to ASD’s Maria Loera on status of fact sheet conversions to Spanish.*
9. “RSS feeds and pod casts.” See Comment Q9c - #52 and also Q12b - #25. *RSS is up and running. Don’t know what, if anything, we would podcast.*

## **V. How Might we Get There from Here**

### **A. The Steering Committee proposes 3 Implementation Phases**

#### **Phase 1.0**

The Workload:

This will be accomplished by the OIS applications development staff with the able assistance of Mike Redgrave of PTSD. It involves the overlay of all include files for the current one, two and three column templates.

What will be Accomplished?

1. Full screen utilization greatly increasing the available screen real estate and thereby minimizing scrolling;
2. Look and feel to match the requirements of the eservices.ca.gov templates thereby meeting the November 1<sup>st</sup> conversion goals;
3. Much improved navigation resulting from top tabs on all template pages;
4. A new top image for PTSD and SSD database pages;
5. New homepage providing a significantly cleaner (read: professional) look;
6. New homepage doubling the number of links available from the top page relative to the current page via the rollover feature of the top tabs essentially bringing the entire website one click closer to the top.
7. New homepage appropriately fit-to-suit the available “Highlights” area eliminating the vast white space often found on our current homepage when the lack of content does not fill the vertical space hard-coded by the height of the left and right-hand columns;
8. A default left-hand navigation bar will include links to “Resources Links:” e.g., databases, maps, forms, organization charts, staff directories, etc.
9. Take down temporarily the search engine intermediate page to mitigate confusion.

Proposed Timeline:

Flip the switch before November 1, 2007.

## Phase 1.5

### The Workload:

Webpage authors will customize and thereafter swap out the left-hand navigation bar as they deem appropriate. Division webpage authors will continue to use Visual Page, NVu or Dreamweaver as their html editor and WS\_FTP Pro as their client to move files to and from all servers.

Meanwhile, OIS and the CARBIS Steering Committee will:

1. Complete the design principles for aesthetics and consistency;
2. Complete a metatags policy and procedure guidelines;
3. Complete an ADA principles and best practices guidelines;
4. Complete the subordinate webpage templates;
5. Complete the duty statement for the Division Webmaster;
6. Begin (if not complete) the new regs.htm webpage area;
7. Begin a set of stakeholders and other portal pages;
8. Work out strategies to lessen the wordiness of our site beyond the implementation of portal pages;
9. Ensure that all significant activities of ARB staff are recorded by a list serve broadcast;
10. Begin work on various other initiatives identified above in the survey plus from the division Content Plans: i.e., Appendix H.
11. All future documents on the web including meeting notices and other .pdf files will include a link to the webpage upon which they are linked.
12. Build portal pages (links without descriptive text) for msprog.htm, cc.htm, biofuels, fuels.htm, programs.htm, research.htm, etc.
13. Finalize the "Document Areas" for which we want links added to top level webpages such as: "Current Regulations," "Test Methods/Procedures/SOPs," "Meetings," "Presentations," Fact Sheets/FAQs," "Contact Information," "News Releases," and "Archives."

What is Accomplished:

1. The left hand navigation bar will fall under the ownership of Divisions and available for overlaying the resources list. For example, the research.htm webpage left-hand navigation bar will directly link to the Indoor AQ program, Reactivity, Completed Research Studies, Health and Air Pollution, Health Updates, Seminars, etc.
2. Static bread crumbs or “UP LINKS” will be manually included into the customizable left-hand navigation bar.
3. A set of standard second column links called “Documents Area” will be housed with the design principles document and authors will be encouraged to build separate pages for meetings, fact sheets, current regulations, archived materials, etc.
4. Webpage authors will start migrating to a new current standards HTML editor.

The timeline:

To begin by mid - September.

Some webpage authors will opt to skip this left navigation bar upgrade opportunity and wait for phase 2.0 requirements to be identified.

## Phase 2.0

### The Workload:

During Spring 2008, it is our target to have a few webpage authors migrating their phase 1.0/1.5 pages to ADA compliant webpages using xHTML and Cascading Style Sheets (CSS) for positioning. Pre-requisites for this undertaking include:

- Style guide in three parts: Aesthetic / Consistency; Search Engine Metatags, ADA Principles and best practices
- Selected and purchased xhtml editor / FTP client
- Short training program with cheat sheets on the new templates and the new xHTML editor/FTP
- Develop subordinate webpage templates
- Document templates and CSS

### What is Accomplished:

1. An ADA compliant website (e.g., no tables for positioning thereby segregating the content of the site from the code that dictates the display)
2. Implement the use of an xHTML 1.0 strict compliant editor
3. Fully implement the “Design Principles”
4. Force a “contact us” area for all html pages
5. Implement Google search engine-friendly metatags
6. Enable webpage authors to specify which of the top tabs applies to each page
7. Reinstate ARB’s search engine intermediary webpage once able to implement ARB’s advanced search engine page leveraging Google indexing at our root directory levels
8. An updated glossary of new terms and acronyms
9. Reconciliation of webpages to the yellow pages
10. Confirm all second, third and fourth tier pages are located on A-Z Index

### The timeline:

Phase 2 ideally should begin by Spring 2008. It will take years to complete. We will inevitably start at the top pages and work our way down and hopefully merge or delete some pages during the analysis required to build these new pages.

## **B. The Time line and Costs:**

### Timeline:

The entire website should be migrated over to the new look and feel before November 1<sup>st</sup>. By November 1<sup>st</sup> we should be able to start the phase 1.5 migration.

There are approximately 100 initiatives identified above that need to be looked at separate and apart from the State CIO mandate to migrate the site to the new templates. The top priorities are those identified in the Executive Summary with a new improved regs.htm being the top priority for this regulatory agency.

### Costs:

There are no hardware costs. All costs are personnel related plus a small cost for a new xHTML editor for an assumed 200 webpage authors.

Phase 1.0 and 1.5 will require the personnel effort of a hand full of CARBIS Steering Committee folk and much of this is started if not already completed. The major cost area is in the migration of webpages to a CSS formatted environment.

The personnel costs associated with this migration will depend upon the ultimate number of webpages requiring conversion. Not all pages will be converted to CSS as some will be considered redundant and therefore merged with others. Some pages will be deemed obsolete and simply deleted. Assuming 5,000 of the current 7,000 HTML webpages using the Golden Gate Bridge and poppies template would require conversion to the phase 2 templates, and assuming 2 hours per page, we come up with 10,000 staff hours. Given the inevitable underestimation of what it will actually take, we double that and come up with 20,000 hours or ten staff years or an average of one staff year per division. Assuming a target of completing the migration in five years, the divisions will not be noticeably stretched to complete this task.

We will ask that a “division webmaster” be identified in each division to help coordinate the migration with this position to last at least one year.

Assuming we are unable to locate an open source product to handle the editing of xHTML documents, we may have to go with Adobe Contribute or some similar editor at a cost of approximately \$140/desktop. Assuming 200 desktops, this comes to \$28,000.

## VI. Closing Remarks

It can be disheartening to read negative comments about your website structure or page design. But, this is our audience responding to our pleas for guidance, and it has spoken. Bless everyone who took the time to fill out ARB's survey.

The website's prognosis is good. Many of the requests can be accomplished, and in some cases, the cost will be nil. In many cases, we already have made significant progress as we were not oblivious to most of the concerns.

- The website templates given to us by the [eservices.ca.gov](http://eservices.ca.gov) folks are a huge improvement over our currently mandated template.
- Navigation will be hugely improved when we solve the Regulations (<http://www.arb.ca.gov/regs/regs.htm>) problem; this will take some work. We will build the Stakeholders Portal pages. Some of these already exist, but we do not have enough of them to add to a stakeholders listing without embarrassment. Clearly, these two initiatives will improve the morale of our stakeholders.
- Other mini-site maps or portals (Climate Change, Bio-Fuels, etc.) will be required given the continued interdisciplinary approach taken by the ARB to solve its air quality management challenges.
- The move to Google as our default search engine will tone down the heaviest criticism we received. Our users will eventually see that the change has already happened. Having said this, the solution is not complete until we have come into compliance with Google's design requirements. Hopefully this compliance will improve search results in the other public search engines as well (Yahoo, Ask.com, etc.).
- We have a large website and perhaps it can be made smaller by removing some old materials and by being less wordy (or "erudite"). ARB might provide additional summary narratives / overviews for many of our esoteric website areas.
- We have a golden opportunity to communicate the Board's message to our disabled community and the users of newer viewer technologies (iPhones, Blackberries, etc.).

# Appendices

## A. The basic proposed templates:

- [Homepage](#)
- [One Column](#)
- [Two Column](#)
- [Three Column](#)

- Discussion of Other template options:

For phase 2, webpage authors will be given the option of multiple sub-templates for each template type.

- Homepage design concepts:

The homepage is a knock-off of the new CA.gov template with some minor modifications to accommodate ARB needs such as:

1. Placement of A-Z Index on the top and bottom
2. An advanced search engine radio button
3. Drop downs from the top tabs
4. A “Popular Pages” and “Related Links” section
5. A dynamic “Highlights” section populated from ARB’s “Web Services” database
6. A customized footer to provide easy access to all CalEPA sites, etc
7. A cleaner look; fewer ugly icons
8. Fully CSS driven for formatting = fully ADA compliant
9. The top tabs roll-over feature brings content one click closer to the top
10. The search engine confusion is mitigated by setting Google as our default

- Subordinate page design concepts:

Phase one cutover will accommodate the existing one, two and three column templates. The left-hand navigation bar will be owned by the division chiefs enabling them to populate it with “UP LINKS” and “LOCAL LINKS.” All pages top and bottom will include a link to the A-Z Index page plus links to all Cal/EPA agencies, and to our disclaimer and public records act request documents. The top of all pages will provide the search box capability.

**B. Design Principles:**

To view the current version of the design principles, please go to:  
<http://inside.arb.ca.gov/carbis/designprinciples.htm> .

## **C. The Division Webmaster:**

### **What is the need for this activity? What's the pitch?**

ARB's stakeholders are seeking changes to our website to make their lives a bit easier. Some of these changes require the implementation of the new design principles which will require a greater level of coordination between the OIS Webmaster and Division webpage authors. Given the large size of ARB's website and listserv presence and its growth trends and given the number of ARB employees participating in the activities, enforcement of the new policies and procedures will require greater local oversight.

Continued reliance on the ARB webmaster and his one staff person is not going to get us there. We ask each Division Chief to assign a minimum of one staff member half-time for a minimum of one year to assist with the phase 1.5 and phase 2 implementation of ARB's website upgrade.

### **Roles and Responsibilities:**

This Division Webmaster designated by the Division/Office Chief and working with the division "owner(s)" is responsible for the following.

1. Preparing or monitoring the preparation of all documents, data files, and software to be placed on the website. The representative is responsible for the Division/Office's knowledge of and adherence to the policies and procedures outlined in CARBIS "design principles" document.
2. Attending CARBIS Steering Committee meetings and disseminating committee policies, procedures, questionnaires, etc. to division staff.
3. Monitoring the timely deletion or updating of web content as required.
4. Providing or ensuring the adequacy of customer support for any division information that is offered via the website.
5. Assisting in the design, development, implementation and roll out of specific systems brought to the Steering Committee for construction. This task includes the review and maintenance of the Attachment H list of possible action items identified by Division/Office.
6. Training division staff in the use of all tools required to post materials to the website and list serves. This includes the implementation of the new left-hand navigation bar templates, the use of Cascading Style Sheets for positioning to bring the ARB into ADA compliance, and the use of a new xHTML text editor.

## D. Navigation to Regulations and Regulatory Activity:

First, some would argue that the only true embarrassment of our website is that although we are a regulatory agency, our stakeholders cannot go to a single location to find our regs. This failing has not gone unnoticed by responders to our public survey as there was no criticism that even remotely approached the hit we took on this issue. Note that 72% of our users come to the website to find information re: our laws and regulations.

Secondly, once users find the webpage upon which they should be able to get to the current regulation, they can't find the link. This is a page inconsistency issue that is addressed in the design principles document.

A little history: After building in 2000-2001 a system to provide the single webpage to find links to all regulations, we learned that the Office of Legal Affairs is unable to "own" this issue as we were unable to get attorneys to vouch for its content leaving the program staff to house these materials. It turns out that having the program areas "own" these documents works adequately so long as our users can get to the relevant webpage area and that page clearly identifies the "current" regulatory language and pending changes to that language.

The Proposals:

### 1. Links to the Current Regulations.

The new improved regs.htm webpage will include a link to OAL's website with a brief set of instructions on how to navigate that website. This orientation will include the disclaimer statement that OAL houses ARB's **official** regulatory language.

Next, we will make another stab at identifying all regulatory categories; e.g., consumer products, small off-road engines, perchloroethylene ATCM, etc. Each category will link to the program webpage upon which there will be a link called "Current Regulation(s)" taking the user to a clean version of the current reg(s). Ideally, that page would also include a link to a webpage providing a brief summary in plain English of the regulation and a statement as to whether there are any pending changes under consideration. If there are current regulatory changes under discussion, then a link to the meetings and presentations will be required.

Webmaster and BARCU would solicit adds, changes, and deletes via an ARBInside homepage solicitation to staff and periodic reviews of the workshops calendar. The cost of maintaining the BARCU portion of this will be negligible, once built, as there are perhaps only a dozen new areas per year to be added to the list of category links. The workload is to merely identify that there is a new one, decide what to call it and set a link to the program page and the current regulatory language (assume less than one hour per month).

## 2. Links to the Current Regulatory (and Non-Regulatory) Activities.

OIS in 2005 built and implemented BARCU's Board Items Docket System to provide a front door for stakeholders to submit electronically their Board item comments. This system also provides an automated update of a webpage linking the system user to all comments received and approved by BARCU for display. The system accepts attachments and provides the ability to print out all comments (but not their associated attachments) in a single click of the mouse. This is called TRANSPARENCY.

By going to a link found on the homepage, users can see what is available for comment at any given time. But, stakeholders wish to be able to see non-Board items as well. Also, ARB staff would like to use the current system so they do not have to deal with incoming emails and manually-generated webpages to display what comments were received.

Tom Jennings and Kathleen Quetin have worked out an arrangement whereby BARCU will continue to maintain the Board Items Docket System while OMB will own and manage the new "informal / workshop" component of ARB's expanded docket system. System specifications are being finalized and programming has begun to bring this new system up.

We propose the current <http://www.arb.ca.gov/lispub/comm/bclist.php> screen to include a second table for the new "workshops" list. The "viewable public record" link included in the introductory paragraph will point to a webpage listing six docket groupings: Board Items – Active, Inactive and Archived and also Workshops – Active, Inactive and Archived.

Assuming the program "owners" (typically Branch Chiefs) instruct their staff to set up a comment area once the workshops or "public consultation meetings" commence, then that topic is available for tracking by our stakeholders. We can say this because each topic will include a link to the comments received as well as to the top program webpage upon which all the associated documents will reside.

## **E. Navigation for Stakeholders:**

Some websites have a “Who are you?” link that attempts to place relevant information at the user’s fingertips depending upon the person’s line of work, homeowner status, or other attribute. After the webmaster meeting in El Monte February 9, 2006, we built a preliminary stakeholders webpage located at <http://www.arb.ca.gov/html/stakeholders.htm>. This webpage was never linked as it was never sufficiently completed.

We believe that several more user groups can be put together. In other instances, such as “Public Health Professionals,” a committee of interested parties within the ARB could be pulled together to fashion such a webpage. After the development of these pages, an owner should be identified so that responsibility for its maintenance can be identified.

To augment the stakeholders page listed above, could we even build individual mini-site map pages for various pieces of equipment (trucks, motorcycles, air cleaners, cars, small off road engines, gardening equipment, the 30 PERP pieces of equipment, but who would own these pages? See Comment Q8a - #63. Can we come up with a list of equipment page (and can we maintain it?) that links to the regulations that apply to that piece of equipment per Comment Q9a - #17, Q9c - #20? *Talk to whom?*

## F. Navigation for Test Methods/Test Procedures/SOPs:

The webpage <http://www.arb.ca.gov/testmeth/testmeth.htm> is the starting point for this topic area, but it is not complete. This portal page has been reworked at testmethnew.htm but cannot be turned on for lack of a comprehensive mobile sources test area.

Proposed action items:

1. Identify the CFR citations for our consumer product test methods (*again talk to Russell Grace*).
2. Hold a summit meeting with Sacramento and El Monte to build the test methods area for mobile sources. Webmaster will build this to the specifications of MLD, MSCD, MSOD *and others?*
3. See the advance work that has been done for text methods for fuels, consumer products, stationary sources, general (ambient air?)
4. An email from Leo Zafonte@arb.ca.gov dated May 30, 2007 says:

“Webmaster, MLD, SLB in El Monte uses methods 1001 (alcohols), 1002 (hydrocarbons), 1003 (hydrocarbons), 1004 (aldehydes) routinely for motor vehicle testing. These are included in other links on the ARB website, but are very difficult to find. I could not find them listed directly in this new Publications Portal, and I think that they should be definitely added. There are possibly other test methods used in El Monte that should be added, but these are the oldest and most accepted on a national and international basis.”

*Can we accommodate this request?*

## **G. Other Portal Opportunities:**

We need to get our users to their desired subject area faster, and we can do this by trusting that the bulk of our users are regulars, as suggested by our survey responses. They don't need the background. This does not mean that we blow it off, but we give it to them once, not twice. Let them see a bunch of well organized (grouped) outlined links, and then when they click on what they think they want, THEN we give them the orientation that describes the program.

Inherent in this is a trust in our stakeholders to not need to be held by the hand so early in their website experience. All root level directory top pages are possible candidates for a redesign: Get our users to their target top page by increasing the number of links on our top pages. This is done by removing non-link words, specifically descriptions of links that don't need describing for the vast majority of our users. We will provide the explanations hopefully only once at the third or fourth level page.

This migration will begin with small areas that will likely have several divisions involved, Climate Change, Fuels and Mobile Sources, (Is there an alternative name that better describes all the various topics included under the root directory "msprog?")

Hopefully this will also lessen the 7,000 hand-built pages that need to be migrated to the template.

## Appendix H – Action Items by Division/Office

This appendix merely repeats the qualitative portion of the document (pp. 9-31). This final appendix item lists by Division/Office (starting with the Administrative Services Division (ASD) those initiatives that came up in the public survey or have otherwise come to the attention of the webmaster since 2001. Some of these initiatives may have already been completed, and others may not be practicable, but all are included here for consideration, augmentation or deletion.

The ***bold and italics*** suggestions are not assignments for anyone but merely notes for Webmaster on how we might proceed, if ever this is time to pursue any of these proposed initiatives. In most instances, webmaster will be unable to /act at all given existing resources. Webmaster will never act before discussing with Division management. Webmaster will act with the assist or preferably in support of the proposed Division Webmaster.

Please email your suggested edits to [webmaster@arb.ca.gov](mailto:webmaster@arb.ca.gov).

### Appendix H – ASD Action Items to Consider

1. Provide a list of all hard copy mailing lists on ARBInside. Or more ambitiously, provide this list on ARBOutside and provide a form for public users to request they add themselves to a particular list. ***Talk to Alex Axt to see where CalEPA is going on this.***
2. “I have found organization charts to be outdated.” See Comment Q4 - #121. ***Talk to ASD’s Staci Cain, but note that she is unable to make changes until the paperwork is official.***
3. “On homepage you may add links to more important topics in different languages for foreign users.” See Comment Q9c - #49. ***Talk to ASD’s Maria Loera.***

## Appendix H – Chair’s Office Action Items to Consider

1. Working with the program staff, review all fact sheets and FAQs to bring them current. Place each document into the proposed template and provide a Spanish version for each. See Q4 - #72 and #48 for small engines in particular. ***Talk to Genny Paauwe and Patricia Rey.***
2. Build a “Helpline FAQ” document to be linked on the homepage under “popular Pages.” Possible see U.S. EPA’s <http://www.epa.gov/epahome/faq.htm>. ***Talk to John Swanton for Phase one start-up.***
3. A summary of the health and welfare impacts of various pollutants will be updated and approved for inclusion on the website. This was to likely require an expanded explanation of each criteria pollutant ala SCAQMD. ***Talk to whom?***
4. Do we have an up-to-date “gray market” FAQ? ***Talk to John Swanton.***
5. Create a virtual ARB tour. In explaining air pollution and what we are doing about it, we would provide a tour of ARB activities such as testing cars, trucks, sampling fuels, consumer products, air monitoring, source testing, health research and innovative clean air technologies. ***Talk to Peter Dallas.***
6. Finish the media library to ensure ARB has the ability to safely use photos and other images without liability.
7. How to find emissions from a 2006 Nissan Frontier? See Comment Q8a - #14. Can we make this easier to find? ***John Swanton to characterize for the webmaster where this sits.***
8. Can ARB (webmaster or PIO) support a “ARB in the News” this week, last week, and in the near future at the ARB highlights to consolidate items currently located on What’s New, Webcasts, etc. or is this the new definition of the new “Highlights” area of the website underneath the “Information About” box?” ***Let’s see what the need is for this after we implement the new-age template “Highlights.”***
9. We need an “Easy to find and understand list of vehicle emission levels and comparison to EPA bin levels and easy look up for vehicle specific emission certification levels.” See Comment Q9a – #53. ***Talk to John Swanton?***
10. “Looking up engine executive orders is awful. I want to be able to confirm that retrofit devices work with engines. I should be able to do that thru a database.” See Comment #Q9c - #21. ***Talk to John Swanton / Duc Nguyen?***
11. “There should be an accessible historic (1990 to present) data base of the emission results (each type CO, NOX, etc) from each engine type (or device i.e., conversion kit) that you have tested and certified so we can do our own emission calculations for.” See Comment Q4 - #118. ***Talk to PIO’s John Swanton.***

12. “Looking for a history of emissions regulations by vehicle class / weight was impossible. I expected to be able to pull it up in minutes.” See Comment Q8e- #10. ***Talk to PIO’s John Swanton.***
13. “Would be very interested in numbers of vehicles and systems that land on the streets of California. How about how effective certain legislations and programs are in getting the technologies to the people?” See Comment Q9e - #20. ***Talk to Genny Paauwe.***
14. “I think you need more environmental technology information and its regulations.” See Comment Q9e - #10.
15. “Fact sheet and/or history page. You have a history of when laws were enacted but not the consequences of those laws.” See Comment Q9e - #12. ***Talk to PIO’s Genny Paauwe/Sue Wyman.***
16. “Impacts of new regulations on environmental documents especially thresholds of significance.” See Comment Q9e - #13. ???
17. “Status reports for AVR II and ISD systems in test application for review. The industry needs to know what to expect we don’t need manufacturers or such just the basic information on how many systems and at what stage.” See Comment Q9c – #42. ***John Swanton know what this might be about?***
18. “Looking for a history of emissions regulations by vehicle class / weight was impossible. I expected to be able to pull it up in minutes.” See Comment Q8e- #10. ***Talk to PIO’s John Swanton.***
19. A database of equipment, horsepower ratings for the new off-road regulations. Online or downloadable spreadsheets for g/bhp/hp conversions, etc.” See Comment Q9c - #26. ***Talk to John Swanton?***

## Appendix H – ED Action Items to Consider

1. Build and implement the variance database. *Talk to Reggie Guanlao/Paul Jacobs.*
2. Build and implement the Judy Lewis database with a component to accommodate the Department of Justice needs to track enforcement actions. *Talk to Judy Lewis.*
3. Identify what Reggie is working on and the timing of their implementation. *Talk to Reggie to see what impact, if any, his initiatives will have on OIS hardware resources.*
4. Are there resources to get the balance of CAP manuals on the web. *Talk to whom?*
5. “Fast access to penalties and fines of all environmental types would be best. The stick is what gets the regulated community’s attention not playing nice.” See Comment Q9a - #32. *Query Enforcement Division as to whether this information exists, and is it on our Website and easily locatable?*
6. “Explain the VOC enforcement process. Explain the process by which a manufacturer can make sure their VOC is compliant.” See Comment Q9c - #22. *Talk to Steve Giorgi.*
7. Compliance Training course information is out of date? See Comment #Q4 - #89. *Talk to ED’s Dave Kemena.*
8. “I’d like to be able to see more information from the Bureau of Automotive Repair on their Automotive Emissions Inspection and Maintenance program.” See Comment Q9e - #16. *We will have a link to the new Homepage “Collaborations” to BAR’s their smog check program. Talk to Paul Jacobs to see where we send this item.*
9. “I attended a class on vapor recovery at the LA facility and one in Sacramento since then, but finding out about them has been a real problem.” See Comment Q8f - #4. *Query to Mary Boyer: Should all training classes be added to our Events Calendar?*

## Appendix H – EO - OCC Action Items to Consider

1. “A simple page for AB32 implementation organized by subject. Each subject would then have links to published papers, webcasts, schedule of events, etc.” See Comment Q9e - #8. ***Climate Change is the reasonable place to design our next major portal area before the current 600 documents grows to 1,000. The directory structure and family of list serves will then be built to accommodate that structure.***
2. Maintain a calendar for all cc activities for the State of California. ***This has been built by OIS but needs to be fed by OCC.***
3. Climate Change Pavley Bill rules (see Comment Q4 - #114) and technical group late postings? See Comment Q4 - #70. See also Climate Change Comment Q8d – #23. ***Talk to OCC’s Rich Varenchik.***

## Appendix H – EO - OIS Action Items to Consider

No programmer involvement required to implement the following:

1. Build for turnover to OLA the list of current regulations and links to the top program pages housing those clean regulations. *In progress by Sue Pinto.*
2. Identify all Wordperfect files linked on the website and remove or convert to .pdf. *Webmaster to facilitate.*
3. Coordinate the development of stakeholder webpages and thereby populate the /html/stakeholders.htm webpage. *Webmaster to facilitate.*
4. Coordinate the migration of the website to the CA.gov portal look and feel and in phase 2 to an ADA compliant website. *Webmaster to facilitate.*
5. Reconcile yellow pages content to A-Z Index and ensure that all subject top pages have an identified contact. *Webmaster to facilitate.*
6. Consolidate root level directories such as AB2588 and Toxics; AHO and Regact, Reports and mandtrpts, etc. *Webmaster to facilitate.*
7. Coordinate the building of all required portal pages for approval by the appropriate ARB divisions such as CC, msprog, biofuels, test methods, etc. *Webmaster to facilitate.*
8. Change the second sentence on all 150+ list serves to indicate that we will use arbcombo when another list owner feels that another group of list subscribers might benefit from an arbcombo posting. *Webmaster to facilitate.*
9. Coordinate the implementation of the recommendations of the 2007 Public Survey. *Webmaster to facilitate.*
10. Figure out what the “California I/M Program” is and make it easier to find. See Comment Q8a - #83. *Can this be added to A-Z Index? James Goldstene says this has to do with smogcheck? If yes, what do we need to fix?*
11. On the A-Z Index, we need to be on the look out for alternative starting terms such as “On-road Heavy Duty Diesel,” and “Heavy Duty On-road Diesel,” etc. See Comment Q8a - #1, 16. Have all webpage authors go through all “subject top pages” (i.e., the top file in every subdirectory) and look for links that are not already found in A-Z. *This is a phase 2 assignment for all webpage authors.*
12. Can ARB (webmaster or PIO) support a “ARB in the News” this week, last week, and in the near future at the ARB highlights to consolidate items currently located on What’s New, Webcasts, etc. or is this the new definition of the new “Highlights” area of the website underneath the “Information About” box?” *Let’s see what the need is for this after we implement the new-age template “Highlights.”*
13. “I’m from Michigan and a new resident of California. I found the CARB website difficult to maneuver at first. Take a look at the MDEQs webpage <http://wwwmichigangov/deq/>. In my opinion, this website is very easy to

- find what you are looking for.” See Comment Q8a - #75 **Webmaster to see why one user thinks this is a good site.**
14. “...Finding the quickest route to GDF information from the ARB main page is not self evident.” See Comments Q9a - #16 and 22. **What is GDF and add to A-Z Index at a minimum?**
  15. “Not too many issues on infrastructure development for RE distribution at retail level.” Comment Q4 - #26) (huh?) **Who knows what this means? Can we get back to this responder and find out what we can do to fix this?**
  16. “The fact Sheets, Brochures, and Videos page is really cumbersome. It’s kind of a clearinghouse for too much stuff. Needs to be more program oriented.” See Comment Q9c - #5. **Webmaster to get back to this responder if possible and see what specifically can be done to improve this area.**
  17. Bike to Work Week website not updated in two years? See Comment Q4 - #91. **Remove this website area as Marie Schelling is no longer available to support this feature???** **Webmaster to delete this web area if he cannot find anyone to own it.**
  18. “Still looking and time is money. If I miss a single requirement in the preliminary design it could cost millions to retool and recertify parts or systems later on. The regulators seem oblivious to this system design aspect and approach things piecemeal.” See Comment Q8e - #22. **See if we can contact this person as too vague to respond to given the volume of ARB certification programs.**
  19. “Add a way to download meeting details and add to Outlook or other calendar software.” See Comment Q9c - #43. **Talk to OIS’s Vida Gaston.**
  20. For those subject top pages that link to a separate webpage for contacts, add that link to ARB’s yellow pages.

The following items require programmer involvement:

1. Build for turnover to OLA the list of current informal regulatory and non-regulatory activities and links to the top program pages housing links to the meetings area. **In progress by Glenn Kuhn as an augmentation to the current docket system with OMB to become the owner of this new “Workshops” comment system.**
2. Redesign ARBInside homepage once the Novell “My Files” feature becomes available thereby providing web-based access to shared directory areas. Also, add “Interactive Links” for web-based email and Oracle Calendar. **Talk to Sue Smalley.**
3. Implement the on-line tracking tools currently available to manage ARB’s network including network statistics, utilization logs, automation of the process that keeps our network log, data connectivity wiring information on line and a central place for updating. **Talk to Sue Smalley.**

4. OIS could respond more quickly to system downtime alerts if ARB had a pager system that notifies a predetermined individual when a server goes down. *Talk to Sue Smalley.*
5. Automate the authorizations.htm system once an LDAP solution is available for FTP and list serve access. *In progress by Steve Magee.*
6. Replication needed between headquarters and an off-site facility to complete ARB's ORP. *Talk to Vince Hale.*
7. Migrate the Library Card database and the Assignment Tracking systems from Oracle to MySQL. *Talk to Harry Ng.*
8. Enable all webpage authors to be able to go to an html form and get "seeftplog" and "find file" results. *Talk to Steve Magee.*
9. Automate the VBB process. *Talk to Harry Ng.*
10. OIS to work with Kate MacGregor and Ita Quattrone when Kate and Ita come back with the Google solution to provide root directory access to search results. *In progress by Ita and Kate.*
11. Users want the ability to search and only get subject top pages. See comments Q8b - #11, 14, 20, 44, 62. *Can we build an array each evening to include the top page of every directory and then index that array and make it available as an advanced option with the results reflected probably in Swish-e format?*
12. All webcast recommendations need to be reviewed by OIS to see if we can get better performance from Thomas Properties. In particular, we need to get Thomas Properties vendors to generate wmv files on the fly thereby precluding the need to convert these from the DVD files. *Talk to Sue Smalley with Steve Mara or Peter Dallas.*

## Appendix H – EO - OLA Action Items to Consider

1. Assist in implementing an up-to-date regs.htm so that stakeholders can locate current regulatory language. *In progress by Sue Pinto.*
2. Assist in implementing an up-to-date regs.htm so that stakeholders can locate via a single list all current regulatory activity (informal and formal). *In progress by Glenn Kuhn as he augments Board Items Docket System.*
3. Assist in an effort to provide a brief simple English statement as to the purpose of each regulation. *Talk to Tom Jennings.*
4. “How about adding to What’s New regulations just posted?” See Comment Q12c - #17. *This would merely require a list serve posting to the “Board” and to the comment list that OAL has approved the rulemaking. Is there a timing issue that we are thinking might cause confusion for our stakeholders. Talk to BARCU’s Alexa Malik.*
5. “Summary of Board actions the day after a hearing would be great...” See Comment Q12c - #16. *This has come up before in ARB’s virtual brown bag and is easily accomplished with a set of codes for each possible Board action. Can BARCU put this out for us?*
6. “Make it possible to figure out when staff meetings are happening on specific subjects. Have some sort of cross-reference available to find what Board meetings are relevant to particular subjects. Have links to all studies that relate to any particular subject.” See Comment Q9c - #39. *Talk to BARCU’s Alexa Malik.*

## Appendix H – MLD Action Items to Consider

1. The test methods area needs to be the portal to all ARB test methods/procedures/SOPs. *Webmaster to host a summit with MLD, MSDs, ED, and others?*
2. Are all laboratory SOPs now available on the web? *See #1 above.*
3. There was discussion years ago into adding a list of test reports from completed field tests of stationary sources. Did this happen or should it happen? *Talk to whom?*
4. Under the community health area, MLD was considering adding a “Community Environmental Health Monitoring” website area to track pesticide reports and other activities with Jeff Cook to be the owner. *Talk to Jeff Cook.*
5. Mike Kenny wanted the Equipment Parts Warehouse Reports available from the Vapor Recovery homepage, with a link from the Enforcement area. *Talk to whom?*
6. We were going to investigate the feasibility of placing in-use compliance data for vapor recovery systems on the web for the benefit of districts and other states, but the formats had yet to be determined. *Talk to whom?*
7. Is the dioxins database complete? *Talk to whom?*
8. “For Vapor Recovery Approval letters and Executive Orders, I recommend including all letters. I am aware of approval letters as well as AST Executive Orders that are ARB approved but not on the website.” See Comment Q12c - #5. *Talk to Oscar Lopez.*

## Appendix H – MSCD Action Items to Consider

1. Build and implement a ZEV credits database. *Talk to whom?*
2. A Mobile Source Emissions Standard “Book” needs to be developed for all categories. In addition, we need a simplified table with the standards in an easily-digestible format with links to the detail which would be the “book.” *This was a 2001 suggestion and don’t know the status, and don’t know if this applies as well or instead to MSOD.*
3. Help convert msprog.htm to a portal page. *Webmaster to facilitate.*
4. “Why are fleet rules hidden in Carl Moyer Program? I found them here: <http://www.arbov/msprog/moyer/links.htm>. *Talk to Kathleen Mead to confirm that fleet owners can take advantage of Carl Moyer incentives and therefore this is not a problem. Probably this is merely an additional path to Carl Moyer.*
5. The DMS is difficult to use; can it be more user friendly?” See Comment Q9c - #12; Q12b - #6. *Talk to Yvonne Guzman-Davis???*
6. “For instance with the ZEV program can you please post something on your site that says where the program started and where it is now? Could you provide some easy guide to the current ZEV regulations? A Timeline? Something?” See Comments Q8d - #4. *Talk to Analisa Bevan.*
7. “Put a summary together for mobile equipment like forklifts on the cargo / ports / intermodal yards rules and regs. and a timetable for when what action is supposed to have taken place.” See Comment Q9c - #20. *Talk to whom and as well to SSD’s list of action items.*
8. “I have had some difficulty using the certified engine database especially when searching by family name.” See Comment Q12b - #20. *Talk to whom?*
9. “I would include information about the pre-conversion right (see [http://en.wikipedia.org/wiki/Electric\\_vehicle\\_conversion](http://en.wikipedia.org/wiki/Electric_vehicle_conversion)) and basset trailers ([http://en.wikipedia.org/wiki/Basset\\_trailer](http://en.wikipedia.org/wiki/Basset_trailer)).” See Comment Q4 - #132 and Q12c - #2. *Talk to whom?*
10. “Can’t find anything that directly pertains to Diesel to Natural Gas retrofitting of existing in service off-road engines.” See Comment Q4 - #139. *Talk to whom?*
11. “I want to learn more about plans for a hydrogen economy.” See Comment Q9e - #9. *Talk to MSCD’s Melissa Meuser.*

## Appendix H – MSOD Action Items to Consider

1. A Mobile Source Emissions Standard “Book” needs to be developed for all categories. In addition, we need a simplified table with the standards in an easily-digestible format with links to the detail which would be the “book.” *This was a 2001 suggestion and don’t know the status, and don’t know if this applies as well or instead to MSCD.*
2. Possibly add a Motor Vehicles Certification list serve. *Talk to Duc Nguyen?*
3. Build or help build a test methods portal page for all mobile sources. *Webmaster to pull together a summit with MSDs, MLD, ED and others?*
4. Evaluate the usability and if OK, then expand the model webpage design located at: /msprog/offroad/sore/sorecpt/sorecpt.htm as a possible model of other regulatory areas of CARBIS. *On hold.*
5. Add the faulty gas nozzle forms to ARBOutside. *Talk to whom?*
6. Add a “red dye fuel” webpage and link to the Board of Equalization. This new page will explain the program and the ARB’s enforcement role. Does this item go to ED? Should it be linked from Fuels? *Talk to whom?*
7. Create an “In-Use Compliance Recalls” page. At a minimum, this page might identify all vehicles (and engines) currently under recall as a result of ARB’s In- Use Compliance Program. This new page would be subordinate to /msprog/inusecom/inusecom.htm . *QUERY: Presumably this webpage would differ from mailout MSO 01-02 in that the webpage would be added to every month vs. the annual summary report? What else might differ? Do we then establish a list serve for these recalls?*
8. For the aftermarket parts database, users would like to be able to identify by vehicle type and year what aftermarket parts are ARB approved. *Talk to Rose Castro.*
9. Add a virtual tour of the lab. *Talk to whom?*
10. Make sure the “Helpline FAQs” document has a link to up-to-date “grey market” information to make this more easily accessible to our website users. *Talk to John Swanton of PIO.*
11. Help convert msprog.htm to a portal page. *Webmaster to facilitate.*
12. “Make the site more user friendly for manufacturers outside of California. More charts pictures. Simplify certification paperwork. It gets more confusing every year.” See Comment Q9c - #16. *Talk to whom?*

## Appendix H – PTSD Action Items to Consider

1. The ARB Strategic Plan has not been updated since 2001. See Q4 - #19. *Talk to Kurt Karperos.*
2. Post cumulative toxics inventory data for several inventory years. 1996 data would be used as base year data for an emission / ASPEN modeling effort parallel to U.S. EPA's NATA data. Post modeled cumulative toxics data featuring maps of California for the major pollutants. *Talk to whom?*
3. Post facility specific toxics risk data obtained from the AB2588 program. *Talk to whom?*
4. Add planning documents for each of the 35 districts contributing materials to the SIP. *Talk to Kurt Karperos.*
5. Post the annual updates on the State and Local Monitoring Network Plan on the web. *Talk to whom?*
6. Provide EMFAC motor vehicle emissions inventory output, including motor vehicle populations, activity, and emission estimates, for frequently requested years. *Talk to Todd Sax?*
7. Provide OFFROAD model output for frequently requested years.
8. Can we build a page that lists the air quality for the State in one place; or do we already have this? See Comment Q12c - #8. *Talk to PTSD - Jeff Austin.*
9. "A better guide for EMFAC and OFFROAD." See Comment Q9c - #40. *Talk to Todd Sax.*
10. "I know that there are errors in the algorithms used to compute federal and state exceedance values. Plus important air quality monitoring sites are missing." See Comment Q4 – 97. *Talk to PTSD's Jeff Austin.*
11. Is ARB's attainment status information up-to-date? See Comment Q4 - #107. *Talk to PTSD's Jeff Austin?*
12. "Add updated PM2.5 data...." See Comment Q9f - #5. *Talk to PTSD's Patricia Velasco.*
13. "Would be nice to see some demographic information or links to it." See Comment Q8e - #25. *Jeff Austin added a link to DOF demographics to ds.htm.*
14. Make downloading of bulk air quality data consistent across the site. Download should be user friendly." See Comment Q9c - #32. *Talk to PTSD's Jeff Austin.*

## Appendix H – RD Action Items to Consider

1. Build up the library card catalog by ensuring that all ARB deliverables referenced in the RSS database (archived as What's New) are included in the database with a transaction record. *Ita Quattrone to talk to John Hoffman.*
2. Turn research.htm into a portal page. *Annmarie Mora/Steve Mara to facilitate.*
3. Cross link AFIP and ICAT. See Comment Q8a - #87. *Talk to RD – Kevin Cleary to find out what AFIP means.*
4. Post the UCI study on cardiovascular effects in people. See Comment Q4 - #109. *Talk to RD's Steve Mara.*
5. "Air Quality Standards chart used to be html now it is pdf and not clear to read." See Comment Q8g - #58. *RD's Steve Mara to take a look at this?*

## Appendix H – SSD Action Items to Consider

1. Build and implement the TRUPER database. *Talk to Rich Boyd and Mike Guzzetta for status.*
2. Turn fuels.htm into a portal. *Webmaster to facilitate.*
3. Add suggested control measure guidance documents to the web. *Talk to whom?*
4. Reinstate the toxics fact sheets bringing them up-to-date. *Talk to Jim Aguila.*
5. On roster.htm, add a link to a document that delineates the roles and responsibilities between local air district vs. the ARB. See Comment Q8a - #27. *Webmaster to talk to SSD – Mike Tollstrup.*
6. “...Need better organization for consumer products regulations/meetings.” See Comments Q8a - #47, and also Q8a - #74; Q8c - #25. *Talk to SSD – Marline Hicks.*
7. “Looking for engine emissions level standards customers have to meet for Ports and inter-model yards, and am having trouble finding the standards to meet.” See Comment Q8a - #6. *Talk to whom?*
8. Old RACT/BARCT Determinations that were published by CARB are now hard to find. It would be great if the web site had a complete collection of these in electronic form...” See Comment Q9a - #49. *Talk to SSD - ? and confirm we have a yellow pages contact for this.*
9. “Put a summary together for mobile equipment like forklifts on the cargo / ports / intermodal yards rules and regs. and a timetable for when what action is supposed to have taken place.” See Comment Q9c - #20. *Talk to whom and as well to MSCD’s list of action items.*
10. “It’s very hard to find ARB guidelines on the web Esp. for regional offices.” See Comment Q4 - #120. *Talk to whom?*
11. “Some pages like ATCMs are out of date.” See Comment Q8e - #19. *Talk to SSD’s Dan Donohoue.*
12. “I am looking at biodiesel information and government actions-taxation leanings so every bit is golden.” See Comment Q4 - #155. *Talk to SSD’s Gary Yee.*
13. “Local rules vs. state? PERP vs. local?” See Comment Q8e - #9. *Talk to SSD’s Mike Guzzetta.*
14. “Fact Sheets should contain more info about compliance requirements. Most have only general info. Example – Portable engine fact sheets don’t mention dates of fleet avg. targets.” See Comment Q12c - #7. *Talk to SSD’s Mike Guzzetta.*
15. “Need better EDI for permits logs & online inspectors.” See Comments Q12b - #15. *Is this PERP-related?*
16. “Would like more info on results of testing new fuels will be implemented to start reducing harmful emissions. It almost looks like some at CARB are trying to stonewall progress with more meetings and no action...” See Comment Q9e - #18. *Talk to SSD’s Dean Simeroth.*

17. “Cannot find any support for retail level infrastructure support for RE or funding for bio-fuels. If this is not addressed then what is the use of spending billions on research without considering ultimate consumer distribution...” See Comment Q9e - #17. ***Talk to Dean Simeroth?***
18. “Allow people with personal experiences with alternative fuel vehicles to write about their experiences kind of like Amazon.com lets people enter reviews of products.” See Comment Q9e - #1. ***Talk to Dean Simeroth.***
19. “A calendar. I deal with consumer products. I want to know the exact date all information needs to be into the Board. When regulations are due, when they are implementing the changes, if changes have been postponed, etc. I always think something is due.” See Comment Q9c - #50. ***Talk to SSD’s Janette Brooks.***
20. “I am looking at biodiesel information and government actions-taxation leanings so every bit is golden.” See Comment Q4 - #155. ***Talk to SSD’s Gary Yee.***
21. “Local rules vs. state? PERP vs. local?” See Comment Q8e - #9. ***Talk to SSD’s Mike Guzzetta.***
22. “Would like better written information about VOC calculations and rules for consumer products. It leaves a lot to interpretation.” See Comment Q8e - #26. ***Talk to SSD’s Janette Brooks.***
23. “Some pages like ATCMs are out of date.” See Comment Q8e - #19. ***Talk to SSD’s Dan Donohoue.***
24. “...On-line registrations for PERP and tracking on-line of where the registration is in the process.” See Comment Q9c - #25. ***Talk to SSD’s Mike Guzzetta.***
25. “General public to be able to view the site that is set up for local air districts to check on current PERP registrations would allow business to see if our competition had their engines registered.” See Comment Q9c - #30. ***Talk to SSD’s Mike Guzzetta.***