

Draft Minutes - ORIAG Safety Subcommittee

January 8, 2009, 1:30 – 3:00 p.m.

Member Attendees:

Last Name	First Name	Phone Number	E-mail Address	Employer
Heroy-Rogalski	Kim	(916) 327-2200	kheroyro@arb.ca.gov	ARB
White	Beth	(916) 324-1704	eiwhite@arb.ca.gov	ARB
Ashworth	Everard G.	(805) 764-6017	eashworth@algcorp.com	Ashworth Leininger Group
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Brown	Norman "Skip"	(916) 364-0292	skipbrown@deltaconstr.com	Delta Construction
Cox	Charlie	(951) 415-8711	ccox@ironmanparts.com	Ironman
Halloran	James	(916) 498-3331	jph@cat.com	Caterpillar
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Pankonin	Michael	(414) 298-4128	mpankonin@aem.org	AEM
Porcher	Dave	(805) 389-4655	daveporcher@gmail.com	Camarillo Engineering
Prescott	Guy	(510) 748-7433 ext. 3474	gprescott@oe3.org	Operating Engineers, Local Union 3
Ruhlen	Scott	(949) 253-6042	scott.ruhlen@cummins.com	Cummins Cal Pacific
Sikorski	Michael	(949) 223-7745	michael.sikorski@tmhu.com	Toyota Material Handling
Wick	Bruce	(909) 793-9932	bwick@calpasc.org	CALPASC

Applicable Regulations and Standards Comments

Ev Ashworth will send ARB staff the Federal Aviation Administration (FAA) and Society of Automotive Engineers (SAE) requirements for ground support equipment (GSE) and snow cats. It will probably make sense to have a separate document for GSE since there are so many standards.

It was suggested that the ISO 13766 standard (Electromagnetic Interference with Electronic Systems) be added back to the list of safety standards created by ARB (with help from ORIAG).

Flow Chart Comments

The flow chart delineating the process for someone making a claim of unsafe installation was discussed. Ev Ashworth stated that for airport GSE, it may be hard to make the flow chart linear. Beth will talk to Ev Ashworth separately about GSE-specific suggestions regarding the flow chart.

Guy Prescott asked how a fleet owner would determine which device is appropriate for a specific piece of equipment. Beth White replied regarding verification database will give you a summary of a list of devices to start with. Then, need to look at datalogging, safety concerns, etc. ARB staff is preparing an equipment identification number (EIN) package that will be sent out to fleets after they report, and one element of that package will be a list of verified devices.

ORIAG members said the entire ORIAG group would like to see the EIN package and review it. ARB staff agreed to provide it to ORIAG and solicit their comment.

Guy Prescott noted that we need to list general safety exemptions, so that others with same machine can access the exemption without needing to reapply. He also suggested we need to inform people when exemptions end because something new developed.

Skip Brown suggested sending a notice to fleets when something new is verified so they know if their exemption is no longer valid, because it is not fair to ask fleet owners to constantly track the development of new retrofits.

Dave Porcher said that retrofit manufacturers may not be qualified to say if a device is safely installed. ARB should require installers to be certified in some way to be sure they know safety requirements. This is a good idea, which will be explored by ARB staff.

It would also be nice to have a list of "approved installers".

Question: How do we define manufacturers? The flow chart needs to clarify that it's a retrofit manufacturer, if that's what it is.

Beth White answers: The flow chart should state VDECS manufacturers. This edit will be incorporated when the flow chart is updated.

Question: Will manufacturers be willing to write a letter saying something cannot be safely installed?

Beth White answers:

Although there could be liability issues if a retrofit manufacturer admits retrofitting a particular piece of equipment would be unsafe, Huss (for example) has written letters saying that they cannot retrofit certain types of vehicles.

Jim Halloran recommends looking at what Moyer has done (he will supply specifics as to what he means exactly). Jim suggested that and Original Equipment Manufacturer (OEM) should have some say in whether a retrofit is appropriate. ARB staff said some of the documentation could come from a vehicle manufacturer.

Dave Porcher said that one problem is that, as in workman's comp cases, if there's an accident, people will sue everyone.

People want OEM approval to have more prominence – i.e., to be higher up in flow chart. Vehicle OEM contract language sometimes says you cannot modify unit without OEM prior approval.

Charlie Cox said vehicle OEMs would have no incentive to ever approve retrofits. They never would do so.

Many ORIAG members said to add a box to the flow chart that says "Has vehicle manufacturer said retrofit is not safe?" ARB staff agreed to that.

Procedure Comments

The detailed procedure for making claims of unsafe retrofit installation, that accompanies the flow chart, was discussed.

Guy Prescott asked, "What do we mean by "associated documentation"?" ARB staff said we can clarify that; it would include the standard number and why it is violated, mitigation, etc.

List specifically "OSHA, Cal/OSHA, MSHA"

Question: If fleet owns a bunch of identical equipment, do we need to submit one application for a safety exemption or a bunch of identical ones?

ARB staff answers: One that is will be broadly applicable will be sufficient.

Suggestion from ORIAG: Do as a class or category.

ARB staff replies: Yes, that would be good. Give exemption an identifier, so that it can be referred to by that.

Other Comments

Would be good to have some discussion of where retrofits pose problems.

Would be good to provide guidance on how to do datalogging. John Karim may have some useful ideas regarding this. He did well with datalogging the Snowcat Project.

Safety Questions

ARB staff asked for input regarding the appropriate qualification for someone to judge if an installation can be done safely – e.g., Certified Safety Professional, Certified Industrial Hygienist (CIH), or Professional Engineer (PE). Bruce Wick thinks any CIH or PE could determine if unsafe.

Guy Prescott thinks a PE would be better, especially to determine if safe.

Rasto Brezny thinks PE would be good, not sure regarding CIH.

Adam Harper thinks PE would be good for some aspects, CIH for other aspects (e.g., hazardous atmosphere).

Can't be general with required visibility standards, as there are equipment-specific regulations. Forklifts have a different visibility standard.

Petition 507 Comments

Petition 507 was submitted to the Occupational Safety and Health Standards Board on August 7, 2008, by the Operating Engineers (Local 3) and Associated General Contractors. This petition proposed to amend Title 8 (§1590, §1591, §1597). The petition included a proposed amendment to not allow modifications unless there was prior written approval from the vehicle manufacturer. ARB staff is concerned that the language proposed in Petition 507 would be problematic, as it could prevent off-road retrofits. Manufacturers would have no incentive to approve retrofits and would not want to take on additional liability. Some vehicle manufacturers would have a conflict of interest if they market their own retrofit, as they would never approve competitors' retrofits. In addition, ARB staff believes more objective criteria is needed (e.g., ANSI or ISO standard) to define safety issues, especially visibility. ARB staff is developing proposed amendments to Title 8 to provide objective criteria to define when a modification can be considered unsafe (e.g., affecting visibility, thermal safety) and wanted to solicit input from the ORIAG Safety Subcommittee.

Guy Prescott suggested the petition is absolutely perfect as written. He just does not want any fatalities due to retrofits.

Rasto Brezny stated that the requirement for vehicle manufacturer approval is troubling.

Skip Brown stated that it is hard to judge in a mirror how far away something is. The same problem exists with the use of cameras. There is a lack of depth perception. Mirrors and cameras better than nothing, but not as good as a clear view.

Dave Porcher stated that mirrors and cameras may not be appropriate in construction, where there are uneven surfaces, and lots of bouncing. Dave will send an article to

Beth White, that states that mirrors and cameras do not work well in construction applications.

ARB staff requested if anyone on the Safety Subcommittee has any other input regarding the flow chart, procedure, etc. or if they want to discuss Title 8 language, to contact Beth. Due date for input is Tuesday, 1/27/09.