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Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Schnitzer Steel Industries' Comments on the Proposed Amendments to the California Air Resources Board's Mobile Cargo Handling Equipment Regulation.

Schnitzer Steel Industries (SSI) is a global leader in metals recycling industry and has been in business for over a century. SSI is categorized by the Department of Labor as a scrap recycler and processor (SIC 5093) and most of its California facilities are located at inland locations. SSI Oakland contains two separate operations – one for the manufacture of scrap metal and one for the shipment of cargo. The terminal location is segregated from the manufacturing facility by a secure fencing system. SSI Oakland is not affiliated with the Port of Oakland.

SSI appreciates the opportunity to work with California Air Resources Board (CARB) staff and to submit comments on the proposed amendments to the Cargo Handling Equipment (CHE) Regulation. CARB's descriptions of proposed changes are shown in blue, with our associated comments outline below each proposed change.

Summary of SSI Comments

1. Definition of Port: The definition of port should not include non-cargo activities at privately operated facilities that are not on port property. SSI Oakland contains two separate operations – one for the manufacture of scrap metal and one for the shipment of cargo. For SSI Oakland, the equipment used in the designated terminal should be covered by the CHE rule, and the equipment used in the scrap metal manufacturing facility should be covered by the Off-Road Rule.
2. Retrofit Technology: SSI has been working with multiple vendors for over four years in the hope that feasible VDECS technology would be developed, but so far it has not. CARB should amend the CHE rule and assure the CHE fleet operators that if they purchase Tier 3 equipment per the requirements of the rule, then the operator can continue to operate that equipment until a safe VDECS retrofit technology is proven for their specific equipment, under their specific operating conditions, at their specific duty cycle - and all under warranty.
3. Cost: SSI's costs to comply with the CHE rule will be significantly higher CARB expects, and these costs will place us at a competitive disadvantage within our industry. When state funding was made available to ports and their tenants to upgrade equipment, SSI did not qualify for such programs. As an operator of specialized high value equipment, SSI believes that our costs to purchase new equipment, to purchase and install

retrofit VDECS equipment, to test retrofit equipment, to operate retrofit equipment, and to perform opacity testing will be significantly higher than what CARB has stated. Furthermore, if SSI is forced to replace Tier 3 technology well ahead of the end of the useful life of the equipment, our costs will increase even further. Finally, since there have been no significant VDECS developments in the past 4 years, and since we do not expect that VDECS will be developed in the next few years, it may become necessary to purchase new equipment in situations where CARB estimated that costs could be minimized through the installation of retrofit technology.

Amendments to Clarify Language and Intent

1. *Definitions:* Staff is proposing to clarify the intent of the CHE Regulation by modifying several existing definitions including: port; owner or operator; intermodal rail yard; newly, purchased, leased or rented cargo handling equipment; rubber-tired gantry crane; retirement or retire; and compression ignition engines.

2. In addition, staff is proposing to add definitions for the following terms to support both modified definitions and other amendments: alternate PM standard; two-year average annual cargo throughput; water-borne commerce; construction activities; cargo; Class I Railroad; low-throughput port; opacity; otto cycle engine; safe; urban area; warranty period; and Family Emissions Limit.

The original intent of the CHE Regulation was to reduce emissions from diesel equipment used to move cargo at California Ports. Historically, SSI Oakland has not been considered a port. When CARB originally initiated its outreach for the 2005 CHE rule, it did not engage with SSI, and SSI thus did not have the ability to comment on the original rule. In addition, when state funding was made available to ports and their tenants to upgrade equipment, SSI did not qualify for such programs. Finally, when CARB initiated its outreach for the Off-Road rule, SSI was correctly contacted because we are a scrap recycler and processor that operates off-road equipment.

The definition of "Port" in the CHE rule should not include non-cargo activities at privately operated facilities that are not on port property. The CHE rule should only control the emissions from equipment that handles "cargo" at a port; and the Off-Road rule should control the emission from equipment used at non-port facilities. For SSI Oakland, the equipment used in the designated terminal should be covered by the CHE rule, and the equipment used in the scrap metal manufacturing facility should be covered by the Off-Road Rule.

As mentioned above, SSI is categorized by the Department of Labor as a scrap recycler and processor (SIC 5093) and most of its facilities are located at inland locations. SSI Oakland contains two separate operations – one for the manufacture of scrap metal and one for the shipment of cargo. The terminal location is segregated from the manufacturing facility by a secure fencing system. SSI Oakland is not affiliated with the Port of Oakland. Other regulatory bodies designate a separation of Port and Non-Port areas. When the Transportation Worker's Identification Credential (TWIC) program was initiated, SSI worked with the United States Coast Guard (USCG) as well as Homeland Security and established boundaries between our terminal and our manufacturing operations.

3. *Clarifying Language: S*taff is also proposing to clarify that equipment brought onto a port or intermodal rail yard solely for construction or unexpected repairs are exempt from the regulation and other clarifying changes.

   SSI supports this amendment and it is consistent with our response above. Equipment not used to handle cargo should be exempt from the CHE regulation.

Retrofit Requirements

4. *Additional time for equipment with no VDECS available:* Staff is proposing to add two years to the current two years maximum annual compliance extensions for in-use non-yard truck equipment for which there are no VDECS available to provide owner/operators the flexibility to use the least costly compliance option.

   While SSI supports CARB's proposed additional two year extension for in-use non-yard truck equipment for which there are no VDECS available, we are concerned that an additional two years will not be sufficient. SSI has been working with multiple vendors for over four years in the hope that feasible VDECS technology would be developed, but so far it has not. Furthermore, we purchased new Tier 3 technology per the requirements of the CHE rule, and a significant portion of our Tier 3 fleet is unlikely to have retrofits available within the next two years due to the need for significant changes in the engine compartment design for non-yard truck equipment.

   Regarding VDECS retrofits, our experience is that VDECS manufacturers are rushing into the market without first demonstrating the viability and durability of their product in our working environment. SSI can not be expected to pay for un-tested equipment and then serve as the testing ground for new technology. Such activity will place us at a competitive disadvantage within the industry.

   CARB should amend the CHE rule and assure the CHE fleet operators that if they purchase Tier 3 equipment per the requirements of the rule, then the operator can continue to operate that equipment until a safe VDECS retrofit technology is proven for their specific equipment, under their specific operating conditions, at their specific duty cycle - and all under warranty. The retrofit requirements of the amended CHE rule should allow for annual compliance extensions until VDECS becomes available – and not limit the number of extensions. Finally, CARB should not verify VDECS technology until it has been demonstrated on the same equipment we operate and under our type of working environment. Anything less is simply an undue burden on our company.

5. *Add a safety provision for VDECS:* Staff is proposing to add VDECS safety as a reason for determining that there is "No VDECS Available" and granting an annual extension. Under the amendment, the owner/operator would have to demonstrate that there is no VDECS that can be safely and feasibly used for a particular type of equipment. The extension would be reviewed annually and additional extensions would be contingent upon a re-evaluation of whether or not there continues to be no VDECS available for reasons of safety or feasibility.

   SSI supports CARB's new safety provisions for VDECS and commends staff for addressing this important issue. Many VDECS installations require modifications outside of the engine compartment that can impair or impede operator visibility – thus endangering the operator, other facility personnel, other property, and the equipment itself. Safety concerns will be especially relevant for Tier 3 non-yard truck equipment, since the engine

compartment and exterior equipment modifications necessary to enable Tier 4 VDECS may create unsafe conditions (changes to visibility, weight, balance point, temperature, etc). It is our understanding that OSHA is very concerned about any outside engine compartment retrofit installs.

6. *Allow more time for extension application:* The time frame to apply for the "No VDECS Available" extension would be changed from 6 months to 60 days prior to the compliance deadline in order to give operators more time to determine if a compliance extension is needed.

   SSI supports this extension.

7. *Require equipment with a "No VDECS Available" extension to be brought into compliance within 6 months after a VDECS does become available:* Staff is proposing that the "No VDECS Available" extension be amended to require the installation of VDECS, or another compliance option, within six months of notification that a VDECS has become available for the equipment. This is consistent with the current requirements for new equipment that must be retrofitted.

   SSI's position on this issue is dependent on how ARB determines availability. As referenced in our response above, if verification is determined after a manufacture demonstrates that its technology is proven for the specific equipment we operate, under our specific operating conditions, under our specific duty cycle - and all under warranty, then SSI can support the proposed 6 month period. But if SSI needs to first evaluate a new technology under real-world operating conditions, then the 6 month period is too short and should be extended to 1 year. Given the poor past performance of VDECS retrofits on SSI's and similar equipment, SSI can not be expected to retrofit a fleet of equipment until it is certain that the technology will work in a cost-effective manner.

8. *Allow extensions for experimental diesel PM emissions control strategies for gathering verification data:* Staff is proposing to expand the "No VDECS Available" extension for an experimental diesel emission control strategy to allow CHE owners/operators to gather information needed for verification.

   SSI supports this extension

Operational Practices

9. *Low-use compliance extension:* Staff is proposing two one-year annual compliance extensions for equipment that operates 200 hours per year or less. The amendment would allow ARB to limit the number of extensions per fleet to two pieces of equipment or two percent of the fleet equipment.

   While the low-use compliance extension is a positive change, SSI recommends that the extension apply to equipment that operates 400 hours or less and there should be no limit to the number of extensions.

   The low-use compliance extension allows facilities such as ours to a) maintain a back-up fleet, and b) operate specialty equipment that is used so infrequently that SSI can not justify the significant cost associated with replacing/retrofitting the equipment. While this equipment is critical to our continued operation, its minimal use should lead to its exclusion from the CHE rule.

The SSI's facilities operate for extended hours and most equipment will have well over twice the hours that would occur at most Port facilities. In addition, because most of our equipment is used for heavy industrial manufacturing, SSI's equipment is subject to more damage and increased maintenance – thus necessitating on-site low use back-up equipment. SSI is also largely unable to utilize rental units for backup since most of our equipment is built to custom specifications for our heavy industrial environment and our equipment undergoes significant exterior wear.

10. *Non-yard truck equipment transfers:* Staff is proposing to allow non-yard truck equipment owned or leased by one party to be transferred to another location within California that is owned or leased by the same party. Transfers could not be used to comply, or delay compliance, with the regulation. The equipment would be required to apply BACT prior to being used in the new location. ARB would approve transfer requests, on a case-by-case basis, for non-yard truck equipment only.

    SSI supports Non-Yard Truck Transfer change, however, it should not be limited to only Port to Port transfers. SSI operates a number of manufacturing facilities throughout California that are not in a Port area and we must be able to transfer equipment among all our facilities as necessary. As we will discuss below, SSI's operations are not port related. While theOakland facility has a small area dedicated to infrequent loading and unloading cargo onto ships, most of the operations at this facility are manufacturing in nature, this facility is not on port property, and it should not be considered a port under the CHE rule. Most of SSI's non-road equipment fleet is used for manufacturing, and equipment transfers between our facilities and allows for back-up in the case of equipment repairs. The non-road equipment emissions at our SSI facilities, with the exception of Oakland, are regulated under CARB's Off-Road rule, and that rule allows for equipment to be utilized between facilities.

11. *Warranty engine replacement:* Staff is proposing an amendment to allow, in cases of premature engine failure, owners/operators to replace an engine under the original equipment manufacturers warranty with a like-engine even when newer engine standards are in place.

    SSI supports the warranty engine replacement amendment especially in lieu of the fact many of our Tier 3 equipment can not accommodate the changes needed to support Tier 4 technology.

12. *Allow rental of non–compliant equipment for manufacturer delivery delays:* Staff is proposing, in cases where new compliant equipment has been purchased but there is a delay in delivery, to allow owners/operators, for period of up to six months or until new equipment can be delivered, to rent or lease equipment that does not meet current emission standards, if rental equipment meeting current standards are not available and the owner/operator can demonstrate the need to use such equipment. The rental or leased equipment that could be used under the amendment can only be one Tier lower than required engine standards (i.e., if Tier 4 engine standards are in place, only Tier 3 engines could be rented).

    SSI supports the rental of non-compliant equipment for manufacture delivery delays. While rental equipment may not be available for manufacturer delays in our heavy industrial equipment, some of our equipment needs could be met with rentals.

13. *Initiate CHE opacity based monitoring program:* Staff is proposing that an opacity-based monitoring program be incorporated into the CHE Regulation. This program would establish

work practice requirements for annual opacity monitoring of all CHE to ensure proper operation and maintenance such that engines continue to perform as designed or certified. Retrofitted engines would be monitored annually to ensure that the engine continues to be incompliance with the VDECS executive order.

SSI strenuously objects to CHE opacity testing. Our experience is that the VDECS failures are due to the inability of the equipment to tolerate our operating conditions and duty cycle, not due to improper maintenance or operation. This proposal will significantly increase the already onerous cost burden of the CHE rule, and will have no impact on our maintenance or operation of the equipment. Given the complexity and cost of the equipment, it is already in our interest to properly maintain and operate our equipment.

Emission Standards

14. *Treat Tier 4 Engines Certified to Alternate PM Emissions Standards as Tier 3 Engines:* Staff is proposing to require that any engine certified to Tier 4 Family Emission Limit (FEL) Alternate PM standards (Alt PM standards) be retrofitted with highest level VDECS within one year of acquisition. The U.S. EPA allows engine manufacturers to produce a specified percentage of Tier 4 engines built to alternative, less stringent, PM and NOx emissions limits. These engines are referred to as FEL or Averaging, Banking, and Trading (AB&T) engines. The Tier 4 Alt PM standards are essentially Tier 3 standards. Their use would effectively undermine the emission reductions that were anticipated to be achieved by the CHE Regulation with the introduction of Tier 4 engines.

    Even though SSI does not own any Tier 4 Engines certified to Alt PM emission levels, we do not support ARB treating these units as Tier 3 engines. Tier 4 engines are not available for much of the equipment we operate, and we do not expect it will be available within the next few years. Any new equipment purchases SSI makes must be certified to EPA and CARB emissions standards, and as such, SSI should be allowed to operate such equipment in the future. Requiring SSI to retrofit new technology well before the end of its useful life is unfair and an undue financial burden. If SSI purchases a new Tier 4i engine, it should not be required to retrofit it as if were a Tier 3 engine.

15. *Allow demonstration of emissions equivalency for alternative technology:* Staff is proposing an amendment to allow owners/operators to use power systems that they can demonstrate compliance with the applicable new or in-use emissions limits. Hybrid power systems are an example of a type of systems that could benefit from this amendment.

    SSI supports this amendment.

Compliance Requirements

16. *Allow compliance schedule modification to bring older engines into compliance first:* Staff is proposing to allow CHE owners/operators to modify their non-yard truck compliance schedules to permit them to bring older model-year engines into compliance prior to newer model-year engines that are otherwise required to come into compliance before the older model-year engines. The number of engines required to comply each year would remain the same.

    SSI supports this amendment.

17. *Exempt equipment at rural low-throughput ports:* Staff is proposing that any port that has an average annual throughput of less than one million tons and is located more than 75 miles from an urban area would be exempt from the requirements of the CHE Regulation. The Port of Humboldt Bay is the only port that currently meets this set of criteria. If adopted, CHE with off-road engines at an exempted port would be subject to ARB's off-road in-use equipment regulation. CHE with on-road engines would be subject to the on-road truck and bus regulation. The Port of Humboldt Bay is in an ozone attainment area and does not contribute to any downwind violations.

SSI supports this amendment. As a point of clarification, SSI's Oakland facility (which is privately owned, not on port property, and should not be considered a Port by ARB) has an average annual throughput of less than one million tons.

Other Comments

18. CARB's Cost Analysis Does Not Reflect the Cost of Compliance for SSI

SSI is concerned that the cost analysis for the CHE rule, even after the proposed amendments are considered, significantly underestimates the compliance costs for companies like SSI. As an operator of specialized high value equipment, SSI believes that our costs to purchase new equipment, to purchase and install retrofit VDECS equipment, to test retrofit equipment, to operate retrofit equipment, and to perform opacity testing will be significantly higher than what CARB has stated. Furthermore, if SSI is forced to replace Tier 3 technology well ahead of the end of the useful life of the equipment, our costs will increase even further. Finally, since VDECS has not been developed in the past 4 years and since we do not expect that VDECS will be developed in the next few years, it may become necessary to purchase new equipment in situations where CARB estimated that costs could be minimized through the installation of retrofit technology.

Respectfully submitted,

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