# THE NORTHWEST SEAPORT ALLIANCE
**MEMORANDUM**

**MANAGING MEMBERS**
**STAFF BRIEFING**

**Item No.** 5A
**Date of Meeting** May 7, 2019

**DATE:** April 24, 2019

**TO:** Managing Members

**FROM:** John Wolfe, CEO

**Sponsor:** Kurt Beckett, Deputy Chief Executive Officer

**Project Manager:** Jason Jordan, Director, Environmental and Planning Services

**SUBJECT:** Clean Truck Briefing – Implementation and Next Steps

## A. SYNOPSIS

The Clean Truck Program requires all trucks serving the international container terminals to have a 2007 engine or newer or equivalent verified emission controls. The Clean Truck Program deadline was implemented at the international container terminals from December 31, 2018. Cargo is moving smoothly through the gateway, with very few interruptions due to clean truck enforcement at the gate.

## B. BACKGROUND

The Ports of Seattle, Tacoma, and Vancouver, BC, collectively set a goal in 2008 of having 2007 or newer engine year trucks exclusively serving the international container terminals by January 2018 as part of the NWPCAS. In February 2018, the Managing Members took the following action:

- Effective April 1, 2018, all trucks entering NWSA international container terminals must have a 2007 engine or newer or equivalent emissions control retrofits to be considered compliant ("2007 Emission Standard"). To continue to access the terminals after April 1, 2018, a driver with a non-compliant truck may apply for a Temporary Access Pass.
- Effective January 1, 2019, all non-compliant trucks will be turned away from NWSA international container terminals.
- Trucks meeting the 2007 Emission Standard will be able to serve the gateway until at least 2025. This provides certainty to drivers in the process of upgrading that the standard will not change in the immediate future.
- Authorization for the NWSA to spend $1 million to develop a Clean Truck Fund Program and to partner with certified Community Development Financial Institutions (CDFI) to ensure all drivers have access to fair and affordable financing.

Staff are now no longer issuing Temporary Access Passes to non-compliant trucks and all trucks entering the international container terminals must now have a 2007 engine or newer or have an equivalent emission control retrofit installed and approved by the NWSA. Verification is being conducted through the use of RFID tags at both the north and south harbor terminals. The NWSA Clean Truck Program has now been in place for over 3 months.

## C. CURRENT STATUS

The implementation of the Clean Truck deadline has been a success, cargo is moving smoothly through the gateway, with very few interruptions due to turning trucks at the gate. All trucks entering the international container terminals now have a 2007 engine or newer, or have an equivalent emission control system, with no significant impact on the overall number of trucks entering the gateway.

The implementation of the program has decreased Diesel Particulate Matter (DPM) emissions from trucks serving the international terminals by 96%, reducing the pollutant load on our neighboring communities by 33.4 tons of DPM per year. Clean trucks not only reduce DPM – there are a number of co-benefits, such as other air toxics that are also reduced simultaneously by newer truck engines and emission controls. NOx emissions are considerably lower from newer engines, with the Clean Truck fleet now emitting 78% less NOx than our original fleet – a reduction of 567 tons a year.

In EPA's 2011 National Air Toxics Assessment (NATA), both King County and Pierce County were identified as areas where all or part of the population is exposed to more than 2.0µg/m3 of DPM emissions and both counties are on the EPA 2018 National Priority Area list. A Puget Sound Clean Air Agency study estimates that 70 percent of the potential cancer risk in the Puget Sound area from air toxics stems from highly toxic diesel fine particles. Those cancer risks are 10 to 100 times higher than the EPA's acceptable cancer risk values. The NWSA Clean Truck Program has considerably reduced the annual emissions of DPM contributed to this cancer risk and should contribute to positive health benefits for all who live near our port facilities and work at the ports.

## D. LESSONS LEARNED

As the NWSA has never implemented a program like the Clean Truck Program before, there are a number of important lessons to be learned, which will benefit any similar future port/NWSA programs. The NWSA is the only U.S. port to successfully implement a Clean Truck Program like this, above state and federal requirements, which has been highlighted in a number of industry and environmental publications, as well as the front page of the most recent Pacific Gateway magazine. The implementation of this program can serve as a model to other ports, and be used in NWSA promotional materials, demonstrating that we take our environmental commitments seriously.

The key takeaway lessons are that the program was a success due to clear messaging; a unified Commission; the provision of a package of support for truckers to comply with the deadline; the importance of good data and technology to plan and implement such a program; and collaboration across different stakeholder groups. The main hurdle facing the implementation of the deadline was the limited time available in the extension period (Feb –

Dec 2018) to design and implement support programs for truckers, and install/test RFID technology, as there was not much time left before the deadline.

COMMUNICATION

Much of the successful implementation of the Program was a direct result of the clear and consistent message from the NWSA Managing Members, Executives and staff that the deadline was real, and would not be extended. This core message was communicated online (email blasts, social media, NWSA website banner); physically across the gateway (flyers, banners at the gates), at Managing Member meetings and in person with trucking companies and truck drivers. This was reinforced by Managing Members in person being clear the deadline was real in person at our summer and fall 2018 workshops.

As the CTP was a whole port team effort (Operations, Environmental, IT, Engineering, Government Affairs, Communications), an internal Clean Truck Steering Committee, chaired by CEO Wolfe with representatives from all departments, met on a weekly basis throughout 2018 to ensure any updates or changes in project schedule were widely communicated.

As the Program is multidisciplinary, with multiple moving parts (2007 engine requirement; retrofits; RFID technology infrastructure; different trucker support resources; workshops, loan program, scrap bonuses), many truckers and external stakeholders were confused by the different elements, and requirements of the program. For many NWSA drivers, English is not their first language, making communication of the various complicated elements of the program challenging.

During the Temporary Access Pass application process, drivers could answer a number of background questions – 46% identified as non-white, 29% white, and 25% declined to answer; predominant languages, other than English, include Amharic, Tigrinya, Russian, Ukrainian, Spanish, and Punjabi. The NWSA worked with the African Chamber of Commerce to provide translation and support during our summer 2018 workshops, especially working on financial information and DPF/truck maintenance information. However, there are no in-house translation services at NWSA, and other elements of the program had no translation support (e.g. RFID tag helpdesk). Moving forward, a communication plan needs to encompass all elements of any similar program – not only one element (i.e. there was a trucker support plan, and a separate technology rollout program).

GRANT FUNDING

Prior to the NWSA requested change in WA state law that allows Port to contribute to private equipment, which was passed in 2018, allowing ports to invest in clean air technology, the home ports and NWSA were entirely reliant on state and federal grant funding to provide financial assistance to truckers to upgrade their trucks. Grants can only be received by the ports through a competitive process, where staff spend considerable time and resources to prepare grant applications, meeting different grant requirements set by granting agencies, in the hope that applications are successful. In the past, key Northwest Ports Clean Air Strategy Partner agencies have been major supporters of financial support packages for truckers, in collaboration with the home ports and the NWSA. PSCAA, the Department of Ecology and EPA have been major funders and partners of the Clean Truck Program, and many truckers would not have been able to purchase a replacement truck without their grant funding.

However, grant funding timing and availability can be unreliable – for example, the Port of Seattle and PSCAA successfully managed an EPA DERA grant for the ScRAPS program prior to the formation of the NWSA. DERA (Diesel Emission Reduction Act) funding has been available on an annual funding cycle and is specifically targeted by the EPA at reducing the number of older diesel engines, usually through scraping and replacing engines and vehicles. This funding has been a good fit for truck scrapping programs across the US, but funding availability is very uncertain. The NWSA applied for DERA funding for shore power installation in 2019, and it is currently unknown if DERA will continue to be available in future years.

The reliance on grant funding also contributes to the stop-start nature of many of the port's support programs. While the port has grant funding available, we are able to provide support to truckers, but once the grant funds are gone, the program either has to find other sources of funding, or no longer offer assistance to truckers to replace old trucks. This stop-start of support programs is avoided where possible, and staff are constantly assessing future funding sources, but is sometimes unavoidable. The ScRAPS office was able to scrap and replace 413 trucks using different grants (DERA, CMAQ, CMAQ Supplemental), but once the grant funding was exhausted in 2017, truckers no longer had access to funding to help replace their old trucks with compliant ones. Inconsistent funding has caused confusion with the trucking community, as some may not access sources of funding when they are available, assuming they will always be there, whilst others may confuse one program for another. The NWSA Clean Truck Fund financial counselor, at Sound Outreach, found that many drivers were confused between the loan fund and ScRAPS, which were two different programs, funded by different grants.

As different sources of grant funding have different requirements, as set by the granting agency, the port does not have control over the requirements truck owners have to comply with to receive this funding – we don't make the rules. For example, ScRAPS offered two levels of scrap incentives to drivers wishing to purchase a replacement truck, dependent on the model year of the new truck – a driver could receive up to $20,000 for a 2007 or newer truck, or up to $27,000 for a 2010 or newer truck. The two levels of scrap incentives were a result of two different grants, tied to different model year replacements, adding further complexity for drivers.

The reliance of support programs entirely on external grant funding can contribute to uncertainty and a patchwork of financial support for truckers. Securing a steady source of funding is a key component of any future program and can help eliminate uncertainty and the stop-start nature of support. The change in state law in 2018, and new ability of the port to support similar programs themselves, will alleviate this problem in the future, complemented by continued grant funding where possible.

## GATE TECHNOLOGY

The NWSA Clean Drayage System involved the installation of RFID infrastructure at in and out gates at international container terminals included in the CTP (T-18; T-30; T-46; PCT; WUT; Husky; TCT), providing in-gate information on whether a truck is compliant with the program, and providing on-terminal turn times. All international container terminal leases were updated in spring 2018 to reflect the updated Clean Truck Program tariff. The on-the-ground enforcement of turning trucks has been implemented by terminal operators consistently across the gateway. Previously, green stickers were used for a visual compliance check in

Tacoma, this gatewide RFID technology has provided an active enforcement mechanism, where non-compliant trucks receive a red light at the in-gate, and are not able to access the terminal. The installation of RFID infrastructure at international container terminals for NH was budgeted at $945K and actual expenditure was $525K, whereas SH was budgeted at $1,654K and actual expenditure was $824K.

Drivers must purchase an RFID tag from a third-party, eModal, for $103, and complete an online profile for each truck – the RFID and eModal software system is operational in multiple US ports (LA, Long Beach, Oakland, San Diego, Philadelphia, Baltimore). Once an NWSA driver has purchased and registered their RFID tag, that tag is eligible to enter any other port using emodal, and vice versa. Terminal operators, such as SSA at T-18, are also able to use the software to manage an appointment system, where drivers can book appointment slots to pick up or drop off containers.

As a truck approaches the in-gate, the RFID tag is read automatically by a WherePort positioned at each lane, which is integrated into each Terminal and Gate Operating System (TOS and GOS), and provides a Yes/No (green light/red light), allowing a compliant truck to enter the terminal. Non-compliant trucks, or trucks with incorrect information on their emodal account, are turned around at the gate, and contact the NWSA for assistance.

The Clean Drayage System was installed during 2018, with a soft launch rolled out at the start of December 2018 – RFID data was switched on in the South Harbor, so staff could work with the software (Advent) and hardware (Kalmar) providers to troubleshoot issues before the go-live date of January 1, 2019. During the soft launch, NWSA staff identified errors in the data collected across both North and South Harbors. Essentially, the software was listing some compliant trucks as non-compliant and was a result of an early December software update by Advent (the update serves all Advent clients, but included a custom feature for the NWSA). To maintain implementation of the Clean Truck Program deadline, staff worked with terminal operators to visually identify compliant trucks using the green stickers for the first week following the deadline, whilst Advent implemented a software fix.

The full RFID system was rolled out, with the fix in place on January 8. A number of the south harbor terminals have had issues with implementing the full RFID system in the first three months of the program, predominantly due to issues integrating the RFID system into their existing TOS/GOS (installation is configured differently for each terminal). Staff have worked with individual terminal operators on their IT issues. On days when a terminal's RFID system has not been working, individual terminals have reverted back to using both RFID and/or a green sticker to identify whether a truck is compliant, to ensure compliant trucks can still enter the gate.

As all north and south harbor terminals are now fully live with RFID, green stickers are no longer being required at south harbor gates for entry. However, the NWSA will continue to issue green stickers upon request to drivers to display on their compliant truck, for use as a visual back-up if/when RFID technology is not fully functioning at an individual terminal. As the enforcement of the Clean Truck Program happens on the ground at the gate, the priority is to ensure that the gates move truck traffic as efficiently as possible, and that software issues do not hamper the implementation of the program.

ENFORCEMENT

A Diesel Particulate Filter (DPF) is present on all trucks with an engine newer than 2007, and all retrofit trucks that have been installed with an EPA or CARB verified DPF, that control emissions equivalent to the 2007 engine emission standard. One of the concerns about operating newer, cleaner trucks, is that the DPFs are often difficult to service, and can cause breakdowns and engine failure if not correctly maintained. To assist drivers purchasing newer trucks to comply with the deadline, the NWSA invited Mark Sturdevant of Warner Truck Centers to one of the Clean Truck summer workshops in 2018 to provide drivers with a masterclass in how to maintain and operate a DPF. The NWSA videoed this workshop and has posted it on the Clean Trucks homepage, as a resource for truck drivers who could not attend any of the 2018 workshops. The Puget Sound Clean Air Agency have developed a video training course in seven different languages to guide drivers through the differences between older diesel trucks and newer, cleaner diesel trucks. It also shows drivers how to take care of a clean diesel truck. The NWSA has supported this training by helping PSCAA reach out to previous ScRAPS participants and promoting the videos on the NWSA Clean Trucks website.

If not correctly maintained and operated, pollution control systems can cause expensive engine repairs. As a result, many trucking companies have reported that drivers are tampering with their DPFs or removing them, to allow the newer trucks to operate without them as if they are a pre-2007 truck, eliminating any air quality benefits. This is a federal offence, under Section 203 of the Clean Air Act it is unlawful to remove, "*bypass, defeat, or render inoperative*" any part of a motor vehicle's emissions control system. EPA may seek civil penalties or injunctive relief for violations of the Act and regulations, and may bring cases in federal district court or through an administrative process. Violators are subject to civil penalties up to $45,268 per noncompliant vehicle or engine, $4,527 per tampering event or sale of defeat device, and $45,268 per day for reporting and recordkeeping violations. However, enforcement action by the EPA tends to target very large or long-haul fleets, and engine manufacturers.

At the regional and local level, enforcement to ensure individual trucks entering NWSA terminals are not disabling or tampering with DPFs will require physical inspections of trucks – something the NWSA has not done before, and staff does not recommend Port staff take on the role of enforcement. WAC-173421 enshrines the Clean Air Act in WA state law, but does not make clear the enforcement authority – as a result, NWSA staff are working with the WA Department of Ecology and PSCAA to clarify enforcement authority to inspect trucks at NWSA. Ensuring the Clean Truck Program follows through on the air quality benefits it was designed to do is of upmost importance to all CTP partners and agencies.

## E. NWSA TRUCK FLEET

INTERNATIONAL TRUCK FLEET

With the installation of RFID infrastructure at in and out gates at all international container terminals, there is now consistent and robust data to use to analyze the truck fleet across both harbors. During 2018, camera data from Tacoma was combined with RFID data from Seattle on a monthly basis to assess the compliance of the truck fleet, compared to the full RFID system we are now using in 2019.

Overall, as Figure 1 highlights, the total number of trucks entering NWSA international container terminals after the implementation of the deadline has not changed significantly compared to before the deadline – the 2019 fleet is similar in overall size as the 2018 fleet. In March 2019, approximately 3700 clean trucks entered NWSA terminals – for comparison, in May 2018, approximately 3800 trucks entered NWSA terminals. Overall, the fleet size is the same – the only difference is the age of the fleet, as the 2019 fleet is fully compliant with the model year requirement of the CTP.

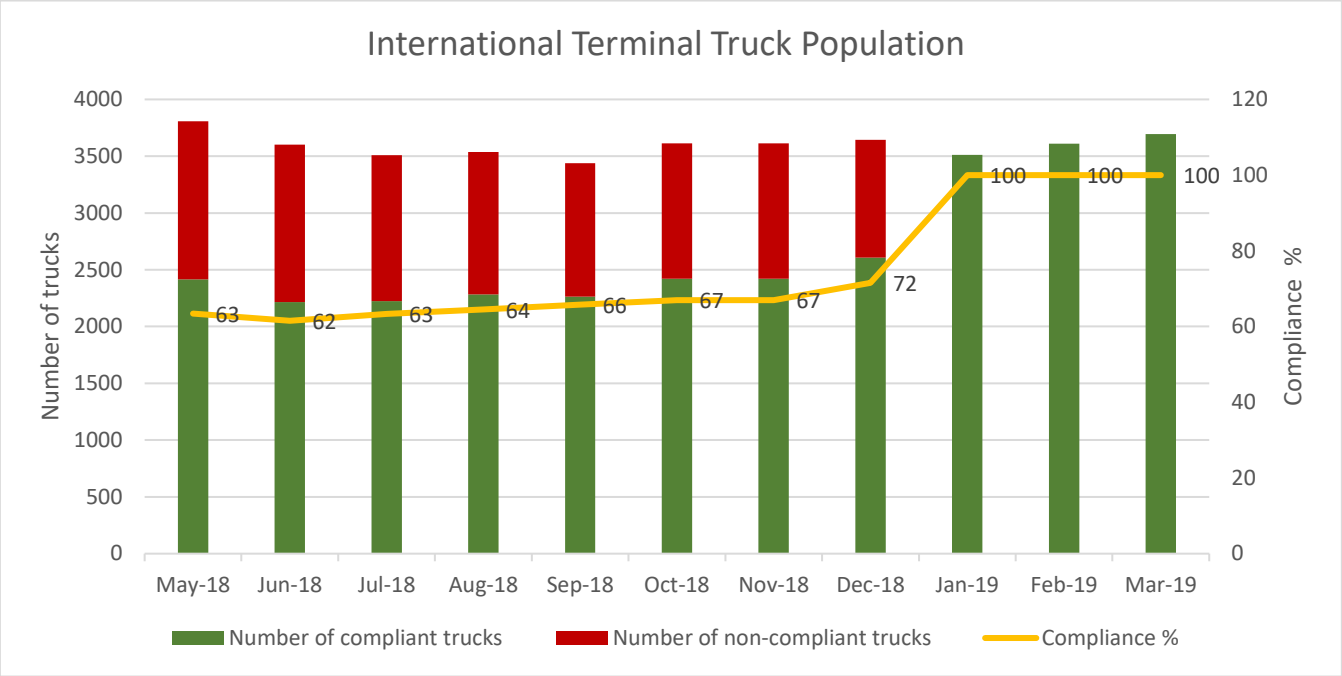


Figure 1: NWSA CTP Compliance 2018 vs 2019

During 2018, the compliance rate rose slightly and steadily every month. Discussions with truckers and trucking companies during the year indicated that many fleets had already purchased compliant trucks to comply with the December 31 deadline, but were planning to continue operating their older, non-compliant trucks right up to the deadline, then switch over in January. The CTP implementation, and RFID data, supports this to some degree, as there is a clear switch between the fleet age in December 2018 vs January 2019, with no drop in overall fleet size.

Figure 2 shows the model year breakdown of the 2019 fleet, where all trucks now have a 2007 or newer engine or equivalent. 2012 and 2013 model year trucks are a clear spike in the fleet, representing around a third of the total fleet (approximately 1100 trucks). Although 121 retrofit trucks have been approved by the NWSA as complying with the CTP, this was not the majority of trucks entering NWSA terminals as most drivers clearly opted to purchase a replacement truck.

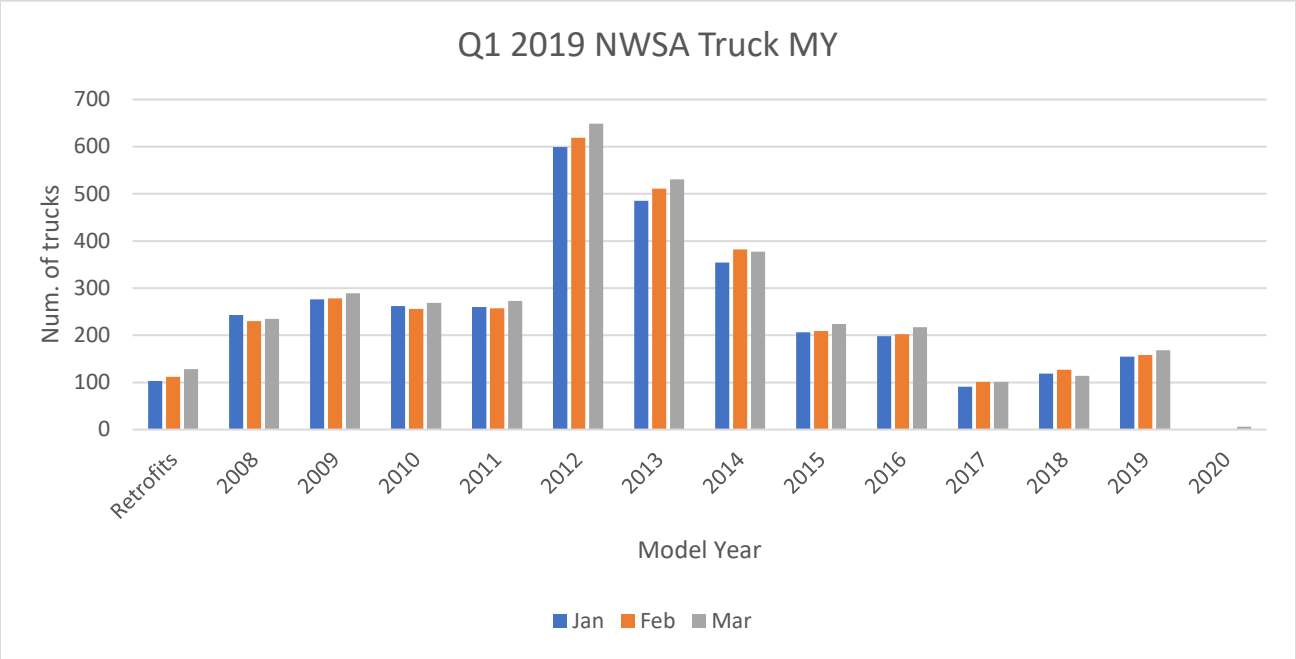


Figure 2: Q1 2019 Model Year (MY) breakdown

DOMESTIC TRUCK FLEET

Staff have tracked compliance rates for clean trucks at domestic terminals throughout 2018, and into 2019 following implementation of the international Clean Truck deadline. There is currently no enforcement of the Clean Truck Program at domestic terminals, staff monitor compliance of this fleet. The domestic terminals assessed are TOTE and West Sitcum in the South Harbor, and we can now identify trucks entering T-25 in the North Harbor following the RFID infrastructure installation for the international CTP at T-30. The domestic fleet is much smaller than the international fleet (approx. 500 trucks vs 3500-4000 trucks), with a great deal of overlap (i.e. trucks that enter both). Most trucks meet the standard already and most also serve the international terminals.

Since the implementation of the December 31 international Clean Truck deadline, the number of non-compliant (i.e. older than 2007 engine) trucks entering the domestic terminals has decreased when compared to 2018, shown in Figure 3. One hypothesis before the CTP deadline was that non-compliant trucks that could no longer work at the international terminals may move to domestic terminals – compliance rates could decrease at the domestics. However, since the implementation of the international CTP deadline, the opposite effect has been observed, as the domestic fleet has also become cleaner. The overall size of the domestic fleet has not changed significantly since the deadline, but the compliance rate has increased from 77% compliance with the 2007 engine standard at the end of 2018 to 86% in February 2019. There are now approximately 75 non-compliant (pre-2007 engine) trucks that enter the domestic terminals. Annual DPM emissions are currently about 0.6 tons higher than if all trucks serving the domestic terminals were compliant.

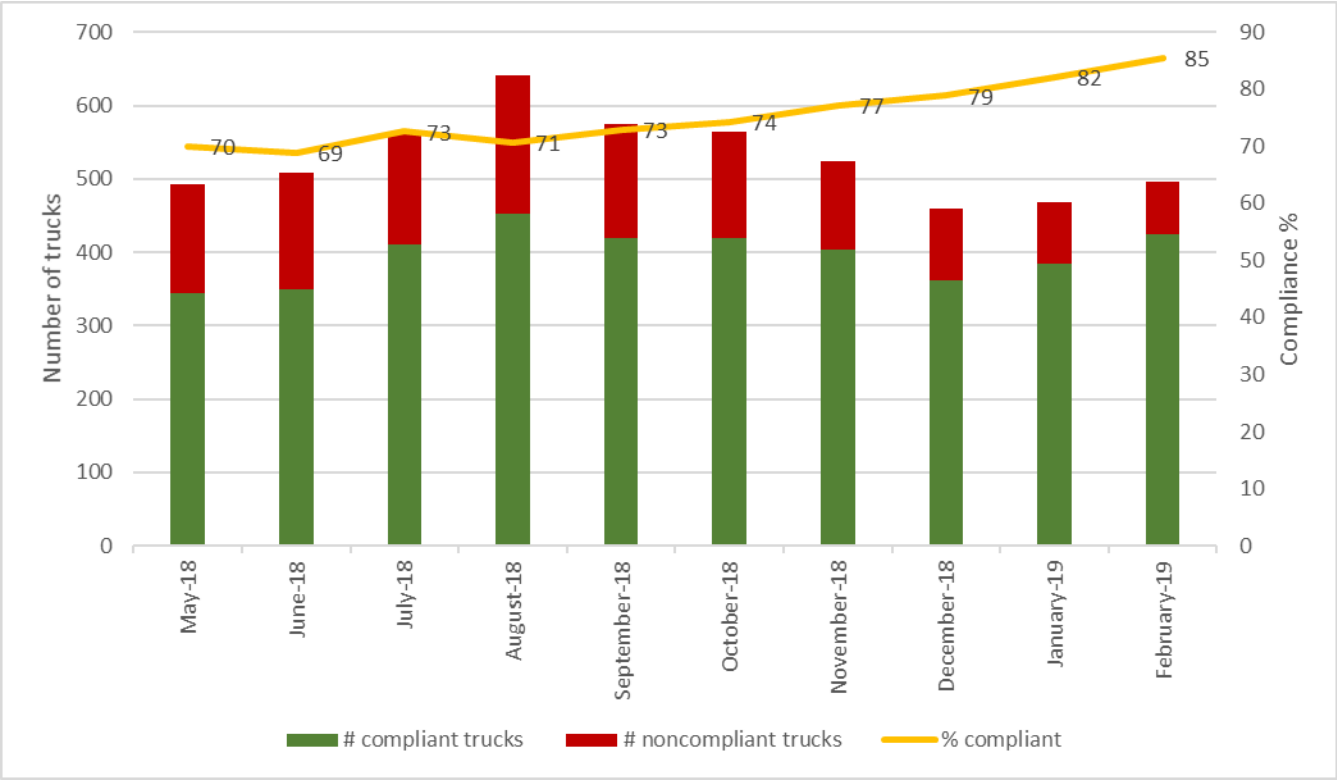


Figure 3: Domestic Terminal Truck Fleet

In Fall 2018, staff issued an RFI to evaluate technology options for gate infrastructure at domestic terminals. To expand the existing Kalmar/WhereNet/Advent solution (installed at international terminals) to domestic terminals, and have consistent technology and reporting across all terminals, was estimated to be $776,000 for installation. Monthly operating costs would be $2778 per each new terminal.

Staff recommend focusing efforts on replacement of non-compliant (i.e. pre-2007 engine) trucks serving domestic terminals, accelerating fleet turnover to newer trucks by incorporating domestic truck owners in future trucker support programs (i.e. scrap bonuses). Staff will continue to monitor compliance rates - if compliance rates fall below 75%, then staff would consult with Executive and Managing Members to reevaluate the staff recommendation. Domestic terminals may be included in future updates to the NWSA CTP, alongside the international terminals.

TURN TIMES

With RFID technology installed, there is now visibility into how many average turns an individual truck makes per day, and what the average on-terminal turn time is (in-gate to out-gate). Figure 4 demonstrates that the majority of trucks entering NWSA terminals during Q1 2019 made 1-2 turns per day. RFID tags are also now able to be read at both the in and out

gates, allowing the NWSA to determine a total on-terminal turn time at each terminal. Figure 5 shows the average on-terminal turn time for the first three months of 2019, split by harbor. The average NWSA turn time was 57.08 minutes in Q1 2019 NWSA has not previously had the capability to assess these metrics, so this will serve as a baseline for future comparison.

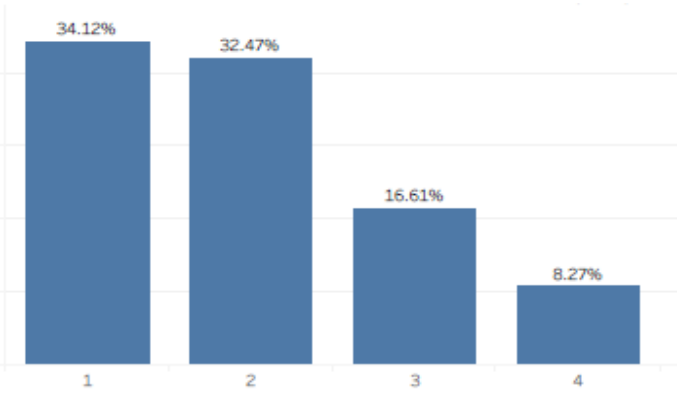


Figure 4: Average number of turns per day per truck – Q1 2019


Figure 5: Average RFID on-terminal turn times (mins)

*Note: NH terminals are Security Check to Out-gate Pedestal; SH terminals are In-gate pedestal to out-gate pedestal (pedestal-to-pedestal).*

Movement of cargo through the gateway has not been adversely affected by the implementation of the Clean Truck Program – January was a record-breaking month as total container volumes reached 326,228 twenty-foot equivalent units (TEUs), a 27.3 percent increase over last year. YTD container volumes are up 10.9 percent, with imports and exports growing 10.1 percent and 13.4 percent respectively. As anticipated, import volumes in February were impacted by an early Lunar New Year, resulting in shippers advancing orders ahead of the normal factory closures in Asia during the holiday. A similar size truck fleet is moving more and more cargo through NWSA terminals – the only difference is that all the trucks are now compliant with the 2007 emissions standard.

CERTIFIED RETROFITS

The NWSA will accept an equivalent emission control system on an older model year truck (certified by EPA or CARB). To be approved for entry to NWSA international container terminals, NWSA staff review documentation provided by the retrofit installer to ensure it is compliant. There are currently 125 approved retrofit trucks who have been through this process and are able to continue working at the NWSA. Most certified retrofits applications were lodged with the NWSA in the first two weeks of January 2019.

CLEAN TRUCK FUND

Providing financial backing to lenders to issue riskier loans to truck drivers was identified as a key mechanism to assist non-compliant drivers at a workshop with stakeholders in April 2019, to help drivers avoid predatory lending practices in the run up to the CTP deadline. As part of a package of support for drivers to meet the Clean Truck deadline, Managing Members approved the establishment of the Clean Truck Fund at their June 5, 2018 meeting. The Clean Truck Fund (CTF) was opened in September 2018, providing a level of loan loss security to qualified lenders to ensure market rate loans were provided to truck owners serving marine terminals so that those owners could replace their older trucks and purchase trucks with 2007 and newer engines.

The Fund was backed by $1 million of NWSA funds, contributions from the Puget Sound Clean Air Agency, the City of Seattle, Department of Ecology State VW funds, and a Dept of Ecology Clean Diesel grant for scrapping bonuses.

| **NWSA Clean Truck Fund** | | |
|---|---|---|
| **Funding Source** | **Contribution** | **Use** |
| WA State Department of Ecology – VW State Fund | $1,200,000 | Scrapping and LLR |
| NWSA | $1,000,000 | LLR and Admin |
| WA State Clean Diesel Grant | $234,000 | Scrapping |
| PSCAA | $200,000 | LLR |
| City of Seattle | $150,000 | Scrapping |
| SCAQMD DERA 2017 Administrative Costs | $25,000 | LLR |
| **Total Funding** | **$2,809,000** | |

| Use | Amount | Source |
|---|---|---|
| Available for Loan Loss Reserve (LLR) | $1,625,000 | WA State, NWSA, PSCAA, SCAQMD |
| Available for Admin – 10% cap of LLR (includes financial counselor costs) | $242,500 | NWSA |
| Available for Scrap Bonuses | $941,500 | Clean Diesel Grant, COS, WA State |
| **Total Use** | **$2,809,000** | |

The Fund backed 10% of the total loan value issued by the two CDFIs in case of default and provided $6,000 scrap bonuses to drivers who also wished to scrap their old trucks and use the bonus towards the down payment on their new truck, in conjunction with a CTF-backed loan. Scrapping loans and scrap bonuses were backed by Dept of Ecology funds. If drivers did not wish to scrap their truck or wanted to obtain a CTF-backed loan for a retrofit, the other sources of funding backed those loans. Staff negotiated a loan enrollment extension with the Department of Ecology that would allow non-compliant truckers to apply for a loan through the NWSA Clean Truck Fund program through January 2019.

A total of $638,968.47 of loan funding was issued, and an additional $102,000 was issued in scrap bonuses once truck drivers had scrapped their non-compliant trucks. Of the $638,968.47 of total loan funding issued, the Clean Truck Fund contributed $63,896.84 (10% of total loan funding). The majority of loans issued were for Ecology-backed scrapping loans i.e., drivers took loans to purchase a replacement truck, and scrapped their old, non-compliant truck to receive an additional $6,000 scrap bonus to add to their loan.

| Type of Loan | Total # Issued | Total Funding Issued | Clean Truck Fund Contribution (10%) | Source |
|---|---|---|---|---|
| Scrapping Loan – for a replacement truck | 16 | $545,981.72 | $54,598.17 | Dept of Ecology – VW State Fund |
| Replacement Truck Loan (no scrapping) | 2 | $81,387.94 | $8138.79 | PSCAA |
| Retrofit Loan | 1 | $ 11,598.81 | $ 1159.88 | PSCAA |
| Scrap Bonuses | 17 | $102,000 | n/a | Dept of Ecology – Clean Diesel; City of Seattle |

Although the total funding, and the two CDFIs under contract were able to fund 325 loans, a total of 19 loans were issued by the two CDFI lenders (Opportunity Fund and Harborstone Credit Union). This was largely due to the very limited timeframe before the deadline for the financial counselor, Sound Outreach, and the two lenders to meet drivers, assess their financial circumstances, and prepare suitable loan packages. Drivers started working with Sound Outreach at the end of September 2018, at the launch of the Fund. However, the first loans were not enrolled with the NWSA CTF until November 2018, as the lenders completed all their checks and balances before enrolling the loans. One of the lenders, Opportunity Fund, were based in California, so had no physical presence in the PNW, adding to delays in communication with drivers, and drivers had additional insurance and GPS installation requirements on the new trucks. Ultimately, the loans backed by the CTF were not simple, easy loans – they were inherently risky to lenders, and took a long time to complete.

Sound Outreach met with hundreds of drivers, many of whom needed extensive financial counseling and considerable time to resolve their credit issues, so did not have enough time to resolve their issues before the deadline to be eligible for the Clean Truck Fund. In these cases, Sound Outreach referred them to other lenders, or are continuing to work with them separately to try to resolve their issues. Many drivers were also frustrated with not being eligible to receive a scrap bonus without it being tied to a loan, a condition of the grant funding from Ecology. Many drivers were willing and/or able to purchase a replacement ruck without one of the CTF-loans, but were unable to receive a scrap bonus without the loan, and so chose to simply sell their old truck, as opposed to scrapping it. Although tying scrap bonuses to a replacement truck loan ensured truckers remained in the business, using those funds for a new replacement truck, there were air quality benefits from scrapping additional non-compliant trucks that could not be realized as a result.

The lack of time to work with all the drivers the Fund could have provided assistance to, and for NWSA to establish reliable working relationships with the CDFIs, were major limiting factors in issuing more loans backed by the Fund. However, although the Fund would have ideally been established 2 or more years before the deadline, there was no funding available at that time for such a program and state law did not allow NWSA to directly provide financial assistance to truckers. Lessons learned from implementing the CTF will be incorporated into future programs for support for truckers.

As there are considerable funds remaining in the Clean Truck Fund, NWSA staff have been discussing ways to utilize the remaining funds to continue support for NWSA truckers, following the Clean Truck deadline. All funding partners want to continue to support the trucking community moving forward, and wish to continue realizing air quality benefits through the program. There is $1.14 million remaining from the Department of Ecology State VW Fund, and $138,000 remaining in the Dept of Ecology Clean Diesel grant. Both these funding sources require engines to be scrapped and replaced, so a further truck scrapping program is the most suitable use of these funds. Staff are in discussions with Ecology to provide further scrap bonuses to encourage drivers to purchase new trucks, tied to a newer model year truck (2010 or newer, 2012 or newer). Providing incentives to drivers looking to purchase newer trucks will accelerate the continued modernization of the NWSA fleet, demonstrates commitment from the NWSA and partner agencies to continuing efforts to improve air quality for our neighboring communities, and builds on the previous 11 years of work under the Northwest Ports Clean Air Strategy (NWPCAS).

Any future trucker support program could also be open to domestic truck drivers, who have not been able to access other port programs in the past (i.e., ScRAPS, Clean Truck Fund, Second Chance Trucks), which have only been open to drivers serving international container terminals. As there are approximately 75 non-compliant trucks (older than 2007 engine) serving domestic terminals, scrap bonuses would also be available to purchase 2007 or newer trucks, at the 2018 $6,000 scrap bonus level. Newer trucks would receive a higher scrap bonus. Allowing domestic drivers to access the same programs as the international drivers could accelerate the domestic fleet becoming cleaner.

As discussed above, correct operation and maintenance of truck DPFs is key to ensuring the ongoing success of the NWSA Clean Truck Program. The NWSA is currently directing drivers to view PSCAA's DPF video training courses, and previous ScRAPS recipients are eligible for a $500 voucher from PSCAA for a DPF cleaning upon completion of the video training course. Staff are examining how CTF funds could support DPF maintenance and cleaning, through workshops and training, in collaboration with PSCAA. Ensuring NWSA truck owners know how to service and maintain their new trucks will ensure the continued success of their businesses and movement of cargo through the gates and ensure the hard-won emission gains from cleaner trucks are not lost.

SECOND CHANCE TRUCKS

The NWSA entered into an ILA with PSCAA in 2018 to assume responsibility of administering a DERA grant with South Coast Air Quality Management District (SCAQMD), where ten trucks from Southern California are sold at a below-market price to PNW drivers. The NWSA was responsible for identifying ten NWSA non-compliant truck owners, to be matched up with the Southern Californian fleet owners, to negotiate a price (capped at $30,000). Once a price was agreed, the PNW non-compliant (pre-2007 engine) truck was scrapped, and the PNW driver took delivery of the new compliant truck from California. The DERA funding administered by SCAQMD is being used to purchase and trial zero-emissions and near zero-emission trucks entering the Ports of LA/Long Beach, supporting the updated Clean Air Action Plan.

A total of 40 applications were received by NWSA during the enrollment period in September 2018. To ensure the program was merit-based, drivers had to provide their 2017 mileage log, to ensure the highest mileage trucks were upgraded. Many drivers struggled to provide any paperwork, and so could not be passed onto the next stage with SCAQMD. A total of 12 drivers were ultimately passed onto purchase trucks in California, with 8 transactions completed (4 drivers withdrew from negotiations).

Representatives of the NWSA and SCAQMD physically inspected the non-compliant trucks in December 2018 and March 2019 to ensure they were road-worthy. A local scrap yard, Simon Metals, scrapped the non-compliant trucks to EPA's requirements. A total of 8 compliant trucks were purchased from Southern Californian fleets, and 8 non-compliant (older than 2007 engine) trucks were scrapped in the PNW.

## F. NEXT STEPS

CLEAN TRUCK FUND

There is $2.63 million remaining of the $2.8 million in the Clean Truck Fund (total $165,897 issued in loans and bonuses). Although loans are no longer being issued, as the risk of predatory lending has abated with the passing of the Clean Truck deadline, staff are working with our partner agencies to identify other ways to utilize the remaining funds. Proposed use of the remaining funds includes the issuance of scrap bonuses tied to newer MY trucks to incentivize the continued modernization of the fleet and expanding scrapping programs to domestic terminals. A physical inspection program of trucks to ensure emission control systems have not been disabled or tampered with will ensure the air quality benefits the CTP is designed to achieve are realized, and that public funds are being used responsibly. Ongoing education and outreach efforts will be stepped up around DPF and truck maintenance, and ongoing financial awareness will ensure the NWSA trucking community is armed with the knowledge and skills to maintain their new trucks and run successful businesses in the port.

Any future proposals for the use of remaining CTF funds, or NWSA funds, would require Managing Member approval.

DOMESTIC TERMINALS

Staff recommend focusing efforts on replacement of non-compliant (i.e., pre-2007 engine) trucks serving domestic terminals, accelerating fleet turnover to newer trucks by incorporating domestic truck owners in future trucker support programs (i.e., scrap bonuses). Staff will continue to monitor compliance rates – if compliance rates fall below 75%, then staff would consult with Executive and Managing Members to reevaluate the staff recommendation. Domestic terminals may be included in future updates to the NWSA CTP, alongside the international terminals.

The Northwest Ports Clean Air Strategy (NWPCAS) is being updated during 2019 and 2020, which will set the direction for future air quality programs including the NWSA CTP. The original CTP goal was established in the original 2008 Strategy, as a joint goal between the Ports of Seattle, Tacoma, and Vancouver, B.C.

NORTHWEST PORTS CLEAN AIR STRATEGY UPDATE

Managing Members established at their February 2018 meeting that trucks meeting the 2007 Emission Standard will be able to serve the gateway until at least 2025. This provides certainty to drivers in the process of upgrading that the standard will not change in the immediate future. Any updates to the Clean Truck Program (CTP) will be determined through the Northwest Ports Clean Air Strategy update, including future strategies, goals, and/or targets. The NWPCAS will be updated through extensive stakeholder outreach in 2019 and early 2020.

The NWPCAS update will include three rounds of outreach, planned for summer (tentatively June 2019), Fall and Winter 2019-2020. The first round of outreach will introduce stakeholders to the NWPCAS and solicit feedback on the strategy's vision and guiding principles. The second round in the fall will solicit feedback and input on specific methods for reducing emissions in each sector (i.e., vessels, trucks, cargo handling equipment, etc.), targets, and

progress reporting. The third round of outreach at the end of the year will present a complete strategy draft for review by stakeholders.

Stakeholders are divided into three groups based on desired level of engagement. A stakeholder committee of about 15 organizations will participate in in person meetings during each round of outreach. A second group will be invited to review documents and provide written feedback, and/or meet with staff to provide comments. Another group will be informed of strategy update progress, as they have indicated that they do not wish to directly participate in the strategy development. The stakeholder committee will include representation from industry, community, and government. Commission representatives are invited to take a leadership role in these stakeholder committee meetings. The public will be invited to comment via an online survey during the second round of engagement.

Any updates to the Clean Truck Program beyond 2025 would be a result of this extensive engagement with Managing Members, stakeholders, and especially the trucking community, throughout this year. The final Strategy, with any updates to the Clean Truck Program included, will be presented to Managing Members for formal approval in spring 2020.

## G. PREVIOUS ACTIONS OR BRIEFINGS

| Date | ACTION |
|---|---|
| January 15, 2019 | Clean Truck Deadline Implementation Briefing |
| December 4, 2018 | Clean Truck Program Update |
| November 6, 2018 | Clean Truck Program Update |
| October 2, 2018 | Clean Truck Program Update<br><br>Managing Members approved ILA with City of Seattle to accept $150,000 contribution to scrapping bonuses under Clean Truck Fund |
| September 4, 2018 | Clean Truck Program Update |
| August 14, 2018 | Clean Truck Program Update<br><br>Managing Members approved ILA with Ecology to accept $234,000 Clean Diesel Grant for scrapping bonuses under Clean Truck Fund |
| July 17, 2018 | Clean Truck Program Update<br><br>Managing Members approved ILA with PSCAA to receive $200,000 for Clean Truck Fund, and ILA with PSCAA to accept 10 CA trucks from SCAQMD<br><br>Air Quality Grant Funding Update |

(table continued)

| **Date** | **ACTION** |
|---|---|
| June 5, 2018 | Clean Truck Program Update |
| April 3, 2018 | Clean Truck Program Update<br><br>Puget Sound Emissions Inventory and Greenhouse Gas Inventory Results |
| March 20, 2018 | Clean Truck Program Update<br><br>Managing Members approved $2,264,000 funding for Clean Drayage System |
| February 6, 2018 | Managing Members approved adoption of NWSA Clean Truck Program<br><br>Managing Members authorized the CEO to negotiate and enter into lease amendments to carry out the Clean Truck Program in the South Harbor<br><br>Managing Members authorized contribution of $1,000,000 to the Clean Truck Fund |
| January 16, 2018 | Clean Truck Program Briefing and draft Policy Motion |
| November 7, 2017 | Clean Truck Policy Update Briefing |