

RESPONSES TO ALEXANDRIA COMMENT CARDS

Why can't Norfolk Southern relocate the Alexandria TBT?

Norfolk Southern's local customers, the gasoline blending facilities, are located nearby in Northern Virginia. Consequently, our facility needs to be located near them. The gasoline terminals in the Northern Virginia market that require ethanol for blending are not served by rail. Norfolk Southern makes every reasonable attempt in each of the ethanol demand markets that we serve to develop capabilities that allow for ethanol to be delivered by rail directly to the blending terminals, eliminating the final truck delivery. Since a direct rail option doesn't exist in Northern Virginia, all of the ethanol delivered to this market must move its final leg by truck. The Alexandria terminal location significantly reduces the number of trucks on the beltway area highways, and reduces the time and the distance the ethanol must travel via truck as compared to any other terminal program in the marketplace today.

Has Norfolk Southern considered changing the time the Alexandria TBT receives rail cars?

We fully understand the community's concerns about noise and are committed to addressing them to the extent feasible. That said, our railroad (and other railroads that are our direct competitors) must operate on a 24-hour basis and therefore we cannot simply shut down or greatly reduce operations during overnight hours. We also must operate this facility in conjunction with interstate railroad operations, so it is rarely as simple as just changing a schedule at one facility. In the event demand for ethanol increases, which may lead us to improve our facility within the existing footprint, we anticipate that noise associated with track switching would actually be reduced because our trains could operate on additional tracks, reducing the number of track switches.

Has Norfolk Southern considered constructing a wall to mitigate noise and potential explosions?

Norfolk Southern has not considered constructing a "mitigation" wall on railroad property. We are operating the terminal as efficiently as possible, which reduces the potential noise from rail operations.

What efforts does Norfolk Southern have underway to protect the residents adjacent to the Alexandria TBT?

Safety is a top priority for Norfolk Southern – for our employees and the communities through which we operate. Through a broad spectrum of hazmat training, certification, and education outreach programs for employees, contractors, and

emergency responders, Norfolk Southern strives to continue to outperform the railroad industry from a safety standpoint.

Why hasn't Norfolk Southern placed trees and shrubs along the perimeter to shield the facility?

Norfolk Southern is in discussions with the City of Alexandria regarding the possibility of planting trees or other landscaping that may help create a visual barrier between the terminal and the community.

What contributions has Norfolk Southern made to Alexandria?

Norfolk Southern supports the Alexandria Fire Department through hands-on and classroom training, periodic refresher tours of the terminal, and practice applications of foam. Norfolk Southern donated a foam application trailer with 300 gallons of alcohol-resistant firefighting foam and a heavy duty pickup truck, which is stored and maintained at the one of the city's fire stations.

Additionally Norfolk Southern is working with the City of Alexandria on a vegetative buffer between the community and the facility.

Who owns the tank cars utilizing the Alexandria TBT?

It's a common misperception, but Norfolk Southern does not own the tank cars that transport ethanol and does not choose which ones will be used. The customers shipping the product generally own these cars, and they are responsible to properly characterize the contents and placard and label the cars accordingly. The cars are typically owned by shippers and rail car leasing companies. We don't determine which types of tank cars are used. That is the responsibility of the shipper, not Norfolk Southern. The design and safety standards for tank cars are set by the U.S. Department of Transportation. Current US DOT regulations and standards allow the use of DOT-111 cars for Class 3 flammable liquids such as ethanol. However, the rail industry through the Association of American Railroads (AAR) has a long history of advocating for enhanced tank car standards for flammable liquids that further reduce the risk associated with the cars. In fact, as a result of these efforts, the AAR voluntarily put enhanced standards in place for new cars ordered after October 10, 2011, and this enhanced standard for DOT-111 cars (referred to as CPC-1232) continues to exceed the US DOT regulatory requirements for these cars. The railroad industry continues to support and advocate for further enhancements to new tank car standards for flammable liquids, as well as for retrofits of the existing fleet.

What controls does Norfolk Southern have over the safety of the tank cars, and who would be responsible if an incident occurs?

The ethanol transfers from tank car to truck at Alexandria occur within a containment area comprised of asphalt pavement and a concrete dike twelve inches tall. This containment area is big enough to hold the contents of multiple tank trucks and tank cars and will prevent the ethanol from being released into the environment. Additionally, smaller portable containment pans are placed inside the paved containment area to catch any smaller spills. All trucks, pumps, and railcars are grounded and bonded during transfers, which prevents an electrical spark. RSI, Norfolk Southern's contractor at the Alexandria TBT, utilizes a clearly defined standard operating procedure that addresses U.S. Department of Transportation protocols for fire and or spill prevention. All RSI employees at the facility are trained in these standard operating procedures as well as emergency response actions in the event of a release. The pumps are equipped with an overfill prevention system that monitors the truck tank level during transloading and shuts the pump off if the tank is full or if the ground is lost. RSI uses dry lock fittings that prevent release of ethanol during the hose connection/disconnection process.

RSI has an emergency response plan that is used to coordinate response by outside firefighting assets in the event of a terminal fire. When the terminal was upgraded to handle ethanol, Norfolk Southern installed a new water line and new fire hydrants at the entrance and along the length of the unloading track for use by emergency responders. A supply of alcohol-resistant firefighting foam is stationed at the terminal entrance, and the Alexandria Fire Department has the key to this container.

What is the history of spills at the Alexandria TBT, and how are spills currently handled?

There have been three ethanol spills since the ethanol transloading operations began in 2008:

- Sept. 29, 2009, about 50 gallons*
- Sept. 4, 2012, about 100 gallons*
- Feb. 12, 2013, about 100 gallons*

In each case, the spill was contained within the containment area at the facility which prevented the material from being released into the environment. The proper authorities, including the Alexandria fire department, were notified of each spill. Following the 2012 spill, at the city's request, Norfolk Southern agreed to report spills to the city by calling 911 instead of using the City's non-emergency number if the spill overflows the portable containment pans used within the larger paved and curbed containment area.

What has Norfolk Southern done to curb CO₂ emissions from your locomotives?

Locomotive emissions are governed by US EPA, and the engine and locomotive manufacturer must comply with strict emissions limits. Norfolk Southern uses and

maintains the locomotives as they are designed to be used in order to maintain compliance with the emissions requirements.

Could the locomotives be equipped with diesel particulate filters?

Norfolk Southern operates a fleet of 3,800 locomotives that comply with applicable EPA regulations. The locomotives operating in and around the Alexandria TBT are assigned to railroad service across Norfolk Southern's 22-state network and are not necessarily dedicated to any one location. Although Norfolk Southern constantly replaces or rebuilds older engines with ever-improving technology, current locomotive scheduling and variable train assignments present considerable challenges to keeping a specific engine or group of engines in Alexandria. Modifying a locomotive's emissions critical components is something that the manufacturer must propose and US EPA must approve. To date, most locomotive engine manufacturers are not using diesel particulate filters.

Why do locomotives idle at the Alexandria TBT?

Railroad operations by their nature require that locomotives remain running under certain circumstances for a variety of safety and operational reasons. Locomotives will idle, for instance, while awaiting the switching and pickup of rail cars. Because the locomotive coolant does not contain antifreeze, engines must be kept idling at cold temperatures to avoid freezing of the coolant and cracking of the engine block. In addition, many of the systems on a locomotive, including heating and air conditioning equipment, brake pressure, communications and other important equipment, require that the engine remain running unless the locomotive will not be needed for a long time. Restarting a locomotive engine and ensuring that the locomotive and its attached train have fully charged brakes is a time-consuming procedure, so turning an engine off and then back on within a relatively short time period is not always practical. Norfolk Southern's policy is to idle locomotives only when needed for operational or safety requirements.

What is being done to control fumes and vapors at the Alexandria TBT?

The ethanol transloading operation is conducted using closed loop vapor recovery, which is basically a hose system that takes the vapors from the truck while loading and circulates them back into the railcar as the liquid is drawn off. Therefore, the ethanol transloading activities have very low emissions and should not create odors. Locomotive emissions are governed by US EPA, and the engine and locomotive manufacturer must comply with strict emissions limits. Norfolk Southern uses and maintains the locomotives as they are designed to be used and maintained.

How many thousands of gallons are stored at the Alexandria TBT?

No ethanol is stored at the facility. The ethanol is transferred from tank cars directly to trucks daily.

How many carloads are stored at the Alexandria TBT?

In its current configuration, the transload facility can hold 20 rail cars in the containment area.

How many new yard lights does Norfolk Southern plan to install?

At the present time there are no plans to change the current lighting configuration.

Why has Norfolk Southern not held an open house forum in the last 5 years for area residents to become familiar with the operation?

Since Norfolk Southern met with the communities in public meetings in 2008, operations at the Alexandria TBT have remained essentially the same. We coordinated this 2014 meeting at the request of the City Alexandria for several months prior to the meeting.

Why were there no opportunities for questions and answers at the open house?

The open house format was selected specifically to encourage direct dialogue with subject matter experts. We regret if any participant's experience was not satisfactory and will remain available to answer questions and concerns in an ongoing basis. We will remain available at AlexandriaTBT@nscorp.com to respond to specific questions or concerns.

Why did the Norfolk Southern employees at the open house not have business cards or name tags?

If requested, we would be happy to provide the names of all Norfolk Southern representatives who participated in the open house. The participants may be contacted via email at AlexandriaTBT@nscorp.com.

You state that there is a foam application trailer with 300 gallons of alcohol-resistant foam. How far away from the ethanol trans loading facility is the trailer and what size fire (how many cars spilling ethanol) would 300 gallons of such foam adequately extinguish?

The foam trailer is located at the Alexandria TBT, per the request of the Alexandria Fire Dept., and the amount of foam available is sufficient to respond to any incident.