#### WHATCOM COUNTY

Planning & Development Services 5280 Northwest Drive Bellingham, WA 98226-9097 360-676-6907, TTY 800-833-6384 360-738-2525 Fax



J.E. "Sam" Ryan Director

# SEP2013-00005 Phillips 66 Crude Unloading Rail Project

## Mitigated Determination of Non-significance (MDNS)

## **Mitigating Conditions:**

Whatcom County Planning and Development Services (WCPDS) has determined that without the following mitigation measures, the proposed development would likely have significant adverse environmental impact:

## Landscaping and Screening

In accordance with the provisions of the Whatcom County Zoning Ordinance, a 100-foot setback will be adhered to and a vegetated buffer (50-foot minimum width) will be established along the north side of Slater Road and the west side of Lake Terrell Road except where deviations are necessary to provide access to the rail infrastructure. Existing native trees and vegetation shall be retained in the buffer area to the maximum extent practicable. Where enhancement of the existing visual buffer is necessary, supplemental plantings consisting of native conifers and native shrubs will be installed at a configuration and density sufficient to establish a visual screen at maturity.

A planting/landscape plan, per WCC 20.80.320, will be developed consistent with the above requirement and submitted to Whatcom County PDS for review and approval in association with the final project design.

## **Unit Train Frequency**

Phillips 66 Ferndale Refinery Crude Rail Unloading project will add up to one unit train every other day, on average on an annual basis, to existing rail traffic on the BNSF Custer spur. According to the Opinion on the Feasibility of Unit Train Traffic on the Cherry Point Subdivision, dated January 25, 2013, prepared by Mainline Management Inc., the introduction of these unit trains will not result in any undue conflicts or congestion. Unit train frequency is limited to add up to one unit train every other day, on average on an annual basis, to existing rail traffic on the BNSF Custer Spur line. Any additional crude oil unit train traffic to Phillips 66 will require additional SEPA environmental review.

#### Air Quality

During SEPA consultation, NWCAA reviewed the environmental checklist and greenhouse gas worksheets and indicated that the SEPA checklist looks complete with regard to air quality issues. The project shall implement the approaches to minimizing emissions through pollution prevention techniques as described in Section B.2.c of the expanded environmental checklist and shall comply with NWCAA requirements for regulatory compliance through the Order of Approval to Construct permit process. Further, train idling shall be minimized to the maximum extent practicable, including shutting down locomotives engines as soon as practicable when not in use and delaying restart until necessary for assembly, movement, or departure from the facility.



A. Reeve Geary Regional Manager Economic Development BNSF Railway Company 2454 Occidental Ave, suite 1-A Seattle, WA 98134

206-625-6355

reeve.geary@bnsf.com

January 15, 2013

## VIA ELECTRONIC MAIL

Jeff Feemster Pat Walsh Phillips 66

RE: BNSF New Business Review for Proposed Cherry Point, WA Facility

This is to confirm BNSF Railway's interest in providing rail service to the proposed Phillips 66 108-car crude unloading facility in Cherry Point (Ferndale), Washington. Please note that your final approval for rail service will be an Industrial Track Agreement (ITA) updated to show the crude facility and executed by BNSF.

At this time, the New Business Review process has been completed; which means BNSF's Operations, Marketing, and Engineering teams have provided preliminary approval of the project concept to move forward. The project concept consists of an industry installed turnout coming off of Phillips 66's lead south of Unick Road, a lead that runs along the west edge of your tank containment berm, and 4 27-car unloading tracks that head to the southeast. BNSF accesses the Phillips 66 owned track via the Cherry Point Subdivision, a branch line connected to the Bellingham Subdivision main line.

The next step for your project is developing engineering plans that meet BNSF's Design Guidelines for Industrial Track Projects. The Design Guidelines can be found at http://www.bnsf.com/customers/pdf/IndyTrkStds 1007a.pdf

BNSF's Engineering group will need to review and approve final track plans for the Phillips 66 facility in the coming months.

Customer growth is a priority for the BNSF Railway. We understand the importance of the new facility to your company, and will continue to work with you to complete the project.

Sincerely,

A. Reeve Geary

Regional Manager - Economic Development

**BNSF** Railway

CC:

Teri Freeman – BNSF Marketing Diana Hill – BNSF Marketing David Johnson – BNSF Engineering Bob Stender – BNSF Operations Loren Matlick – Jones Lang LaSalle



January 25, 2013

To: Joe Murphy, CH2M Hill Engineering

From: MainLine Management

RE: Opinion on the Feasibility of Unit Train Traffic on the Cherry Point Subdivision

## Introduction:

CH2M Hill Engineering retained MainLine Management (MLM) to review the Cherry Point Subdivision (CPS), also known as the Custer Spur, and issue an opinion on the feasibility of unit trains operating into a new Phillips 66 Crude Unloading facility that is being studied for the line. MLM has reviewed the trackage and operations and believes that unit train operations onto the subdivision would be possible if an unloading facility capable of handling unit trains is constructed.

MLM is a rail consulting firm that specializes in rail operations and line capacity planning and analysis. For many projects, MLM utilizes the Rail Traffic Controller (RTC) model simulation tool, which is the same model simulation program utilized by BNSF. For this analysis model simulation was not utilized as it was deemed unnecessary.

MLM has provided rail analysis services for a variety of clients in the State of Washington, the greater Pacific Northwest and in British Columbia. Examples of MLM analyses in this region include the WPPA/WSDOT Rail Capacity Study updates in 2004, 2009 and 2011 (in conjunction with Cargo Forecast Updates); detailed analysis of the Greater Vancouver BC Rail Network; and, main line and off main line studies for the Ports of Seattle, Tacoma, Longview, Vancouver USA, Portland, Port Metro Vancouver BC and Transport Canada. In addition, MLM is providing professional consulting services to the Washington and Oregon DOT's regarding implementation of High Speed Passenger Rail between Eugene OR and Vancouver BC.

#### Discussion:

The Cherry Point Subdivision is an 8.8 mile spur off of BNSF's Bellingham Sub at Custer, WA. Custer is approximately seven miles south of the US-Canadian Border at Blaine, WA. The CPS accesses multiple rail served industries between Custer and Cherry Point, WA.

The CPS is a single track subdivision operated under Track Warrant Control and Yard Limits. The first 1.8 miles of the subdivision have a maximum allowable speed of 10 mph. From milepost 1.8 to milepost 5.1, the subdivision is operated at 25 mph. The last 3.7 miles are again restricted to 10 mph.



There is a wye at Custer to allow movement onto or off of the subdivision for either a northbound or southbound train on the Bellingham Sub. There are three yards on the subdivision; Intalco, Elliott and Cherry Point.

Intalco has two yard tracks that are approximately 4,500 feet in length; both tracks connect to the CPS main track at both ends of the yard. Elliott has six yard tracks that are approximately 1,800 feet in length; four tracks have connections at both ends and two tracks are connected only at the south end of the yard. Cherry Point has three yard tracks that are approximately 1,400 feet in length that all connect to the main track at both ends. The yards are used to store inbound cars for on-line industries, to hold cars that are being assembled into out bound trains and to provide tracks for locomotives to run around cars to assist with switching the local industries.

BNSF currently operates over the Cherry Point Sub at least six days per week. There are currently at least three active industries along the subdivision that receive or generate rail traffic.

It is MLM's understanding that the unit trains that are being considered would have approximately 108 cars and three to four locomotives, which equates to a train length of approximately 7,100 feet. It is anticipated that there would be three trains per week on average, and the trains could come from origins that would approach Custer from either the north or the south. Since there is a wye at Custer as previously described, trains from either direction would be able to operate onto or from the CPS.

MLM believes that if the facility that is being planned has sufficient trackage to accommodate the projected size of the unit trains, operations into or from the facility will not be an issue. Once the train has arrived, Phillips 66 has informed MLM that it will take approximately 18-20 hours to unload. The train would then be released to BNSF as an empty train, reassembled and would depart.

With three trains arriving per week and an 18-20 hour unloading schedule, only one Phillips 66 unit train should be on the CPS at any given time. That train would have to share the subdivision with BNSF trains currently assigned to switch or serve other industries along the line. MLM believes BNSF will develop an operating plan that would allow all trains to safely operate on the subdivision, even if more than one train was operating at the same time. The track warrant control and the yard limit operating rules of the line would insure that the trains would not be allowed to operate on the same portion of the single track simultaneously.

Because rail operations are not perfect, MLM believes there will be occasional times when two unit trains destined to/from the Phillips 66 facility may be in the Cherry Point vicinity at the same time. Given that the facility is only capable of holding a single unit train at a time, MLM believes BNSF then would be responsible for staging the second train at a location short of the Custer was until the first train leaves the subdivision.

MLM does not believe this will create a problem as BNSF currently has multiple facilities across its system where this type of timing is required, and is consistent with its current operations for staging bulk trains into various facilities in the Pacific Northwest and British Columbia.



Therefore, under the proposed train volumes, MLM strongly believes that the Cherry Point Subdivision could accommodate unit trains that are scheduled to operate three times a week on average into an unloading facility.

## Conclusion:

Based on the information provided for review and its own research, MLM believes that the introduction of three unit trains on the Cherry Point subdivision will not result in any undue conflicts or congestion from a rail perspective. While some "metering" of trains to/from the subdivision may be necessary from time to time, MLM believes that BNSF has considerable capacity external to the CPS to efficiently manage train flows between the Custer wye and Cherry Point.

In addition, though not part of the direct request for this review, MLM reviewed the current main line capacity demand between Everett and Blaine, as developed in the 2011 Rail Capacity Update for WPPA/WSDOT. That review indicates that the addition of 3 loaded unit trains per week (6 total trains with empty movements) would have minimal impact on the current capacity on the Bellingham Subdivision.

If any questions arise as to the content of this report, please contact Dave Hatzenbuhler at (308) 629-1196 or Eric Lyman at (817) 605-9915.

Respectfully,

David

Digitally signed by David Hatzenbuhler ON: cn=David Hatzenbuhler, o=MainLine Management Inc., ou,

Hatzenbuhler Date 2013.01.29 17:55:05 -07/00

President

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J.E. "Sam" Ryan Director

## SEP2012-00059 BP Rail Logistics Project

Mitigated Determination of Non-significance (MDNS)

## **Mitigating Conditions:**

Whatcom County Planning and Development Services (WCPDS) has determined that without the following mitigation measures, the proposed development would likely have significant adverse environmental impact:

## Landscaping and Screening

In accordance with the provisions of the Whatcom County Zoning Ordinance, a 100-foot setback will be adhered to and a vegetated buffer (50-foot minimum width) will be established along the south side of Grandview Road except where there is an existing cleared natural gas pipeline easement and where deviations are necessary to provide access to the rail loop.

Existing native trees and vegetation will be retained in the buffer area to the maximum extent practicable. Where enhancement of the existing visual buffer is necessary, supplemental plantings consisting of native conifers and native shrubs will be installed at a configuration and density sufficient to establish a visual screen at maturity. Proposed visual screening measures may also include installation of a vegetated berm between the project area and Grandview Road where feasible and appropriate.

A planting/landscape plan will be developed, per WCC 20.80.300, and submitted to Whatcom County PDS for review and approval in association with the final project design.

## Rail Logistics Project and Existing Roadways

According to the applicant, the rail logistics facility project has been specifically designed to accommodate an entire unit train within the interior track loop. Upon entering the facility from the Custer spur line, a train will be maneuvered onto the loop track where it will proceed forward until the entire train is off the spur line and it is completely contained within the BP facility. The project design also includes a second parallel track to accommodate a second train to allow for the effective management of inbound and outbound trains. This second track is also of sufficient length to contain a complete unit train within the facility. Therefore, existing roadways will not be blocked during transfer operations.

During SEPA consultation, WSDOT concurred with the information provided in Section 14, Transportation, of the expanded environmental checklist. In an agreement between WSDOT and BP, the mitigation funds that were originally identified from the previously planned Cogeneration Plant will be applied towards the construction of channelization improvements to the intersection of SR 548/Kickerville Road.

As designed, the rail logistics facility will not impact the intersection of SR 548/Kickerville Road and the BNSF Custer Spur line. The intersection of SR 548/Kickerville Road and the BNSF Custer Spur line shall not be blocked during the transferring operations during the life of this project. If it is determined that this project does causes blockage or excessive traffic disruption as a result of the transfer operation, the SEPA Official and BP shall work together to provide reasonable improvements to traffic flow at this intersection. The SEPA Official can coordinate with WSDOT in determining reasonable improvements in the future.

## Unit Train Frequency

The Rail Logistics project will add up to one unit train per day, on an annual basis, to existing rail traffic on the BNSF Custer spur. According to the applicant discussions with BNSF, the rail traffic associated with the BP Refinery Rail Logistics Project can be accommodated and managed with the existing BNSF infrastructure. This has also been verified by an Analysis of BP Train Traffic at Custer Spur, prepared by AECOM and dated July 19, 2012.

Unit train frequency is limited to add up to one unit train per day, on an annual basis, to existing rail traffic on the BNSF Custer Spur line. Any additional train traffic by BP will require additional SEPA environmental review. Train coordination shall be done as discussed in the Analysis of BP Train Traffic at Custer Spur document, prepared by AECOM and dated July 19, 2012, to the greatest extent possible.

## Air Quality

During SEPA consultation, NWCAA reviewed the expanded environmental checklist and indicated that the SEPA checklist looks complete with regard to air quality issues. The project shall implement the approaches to minimizing emissions through pollution prevention techniques as described in Section B.2.c of the expanded environmental checklist and shall comply with NWCAA requirements for regulatory compliance through the Order of Approval to Construct permit process. Further, train idling shall be minimized to the maximum extent practicable, including shutting down locomotives engines as soon as practicable when not in use and delaying restart until necessary for movement or departure from the facility.

## Archaeology and Historic Preservation

The Archaeology Monitoring and Inadvertent Discovery Plan, BP Refinery Rail Logistics Project, prepared by URS and dated August 2012 shall be implemented and followed during construction and ground-disturbing activities associated with the project.

#### Stormwater

During SEPA consultation, the WSDOE indicating that this project may be subject to one of the Ecology's National Pollutant Discharge Elimination Systems (NPDES) permits. A Construction Stormwater General or Industrial Permit may be required by the Department of Ecology (WSDOE) for this project. Contact the WSDOE Bellingham Field Office at (360) 715-5200 to determine if an NPDES permit is required.

AECOM 2101 Webster Street Suite 1900 Oakland, CA 94612 www.aecom.com 510.622.6600 tel 510.834.4304 fax

## Transmittal

То	Amy Pederson			Page	1
cc	Aaron Silver				
Subject	Analysis of BP Train Tra	affic at Custer Spur			1
	9 2				
From	Mark Sisson				
Date	July 19, 2012	g	The state of the s		

The memo summarizes the potential impact of adding an additional train per day to the Custer Spur. The Custer Spur connects the main BNSF rail network to the BP refinery and other industrial sites near Cherry Point, WA. Figure 1 below shows the location of the project site. Note the location of Interstate 5 in the upper right corner.



Figure 1 Image of Custer Spur Location

# AECOM

BNSF now runs one manifest train per day serving BP and other terminals which lie between BP and the dead end of the spur. These trains range from approximately one-half mile to one mile in length and travel at 10mph when loaded and 25mph when empty. The trains arrive with empty cars to be loaded at the BP refinery, as well as cargo loaded rail cars that are emptied at BP. BP is proposing to add one additional unit train per day. AECOM has analyzed the potential interference between the two trains (existing and proposed) and found it to be minimal.

Trains must travel approximately six miles on the Custer Spur between the BP mainline near I-5. The BP facility is located approximately six miles away from the intersection of the spur and the double track mainline. A loaded train will take approximately 42 minutes to travel that distance and clear the spur by pulling off into a dedicated storage track at the BP facility. An empty train will take approximately 17 minutes to depart from BP and travel the six miles to the double track mainline.

With a total of two trains per day, the potential for conflict could arise if one train is ready to depart and there is an incoming train occupying the single track spur. In this unlikely scenario, the empty train would not be released to depart if the arriving train is on the spur, or if the arriving train is expected to reach the spur before the empty train will clear the spur in the eastbound direction. This means that in each 24 hour period, there is approximately one hour that would be unavailable for train departures from the BP Cherry Point Refinery.

If train departures were not controlled, there would be approximately a 1/24 or 4.2% chance of a conflict. However, this is not the case. Train departures would be coordinated by BP and BNSF staff. As a result, AECOM assumes that the movement of the two trains can be coordinated to effectively avoid any conflict between trains on the Custer Spur. Therefore, with proper co-ordination, the existing Custer Spur infrastructure would be able to handle two trains per day.

As discussed above, train movement would also be coordinated by BP and BNSF to minimize potential vehicular traffic impacts. Therefore, trains would also be scheduled to avoid the AM and PM peak traffic hours.