

Spearhead Pipeline Batch Pigging Procedures

Effective: August 15, 2022.

Rev. 4

Purpose	<p>The purpose of this document is to set out procedures for the mechanical separation or batch pigging of petroleum crude oil in the CCPS Transportation, LLC’s Spearhead Pipeline System (“Spearhead”). Spearhead will mechanically separate <u><i>up to a maximum of 34 interfaces (or up to a maximum of 17 individually pigged batches)</i></u> per month to minimize quality impacts when transporting crude oil on Spearhead.</p>
Responsibility	<p>The Manager of Scheduling and Logistics within Enbridge Pipeline’s Shipper Services shall be responsible for implementation of these procedures and for any changes or modifications.</p>
Pigging Determination	<p>The Supervisor of Spearhead Scheduling will review all tenders nominated on Spearhead. They shall determine if batch pigging will be required between batches of petroleum oil to enable reasonably quality to be maintained. The Supervisor of Spearhead Scheduling will determine the number of batches that will require batch pigging based on the priority criteria described below:</p>
Pigging Criteria	<p>Criteria for batch pig eligibility shall be determined as follows:</p> <ol style="list-style-type: none"> 1. First priority for batch pigging eligibility will be for any light crude petroleum batch preceding or following a heavy crude petroleum batch if, in the sole determination of the carrier, the light batch quality would be substantially degraded by its proximity to the heavy batch. 2. Second priority for batch pigging eligibility will be for any medium crude petroleum batches preceding or following a heavy crude petroleum batch if, in the sole determination of the carrier, the medium batch quality would be substantially degraded by its proximity to the heavy batch. <p>Should there be an insufficient number of pigs to meet any of the criteria above, then the remaining number of pigs will be assigned to respective Shippers based upon their pro rata share of tendered volume for crude meeting the respective criteria where the shortfall of pigs occur. In the case where all factors are equal among shippers in a respective criteria requiring batch pigging, then Spearhead shall use a random selection process to determine which shipper will be allocated pigged batches.</p>

<p>Scheduling of Batch Pigs</p>	<p>The Supervisor of Spearhead Scheduling or their designate shall determine the total number of batches that will require batch pigging every month based on the Pigging Criteria defined above. If the total number of batches requiring mechanical separation requires more than 34 pigs, then they shall immediately contact the Spearhead shippers who have tendered batches of petroleum crude for the Nomination Month and inform them that Spearhead will be unable to pig all of the batches. Shippers who have nominated batches that will not be pigged will have to make alternate arrangements to ship their petroleum crude batches elsewhere or accept the possible contamination of different grades of petroleum crude batches. In addition, batches that require pigging will be noted on the Daily Pump Orders that are sent to the Operations Control Center.</p>
<p>Management of Change</p>	<p>This document shall be reviewed by the Manager of Scheduling and Logistics at least once per calendar year or as changes are required. Any changes or modifications shall include an effective date and be posted on Swiftlink.</p>