



Stream Documentation Regulatory Overview

Item	Description	40 CFR 61, Subpart FF Reference	
Vessel/Equipment Number	Document the equipment number from the P&ID for the piece of equipment where the material/potential waste originates.	§61.356(b)	
Material Origin/Equipment Description	Provide a brief description of the piece of equipment where the material/potential waste originates.	§61.356(b)	
Stream Description	Describe the stream leaving the piece of equipment where the material/potential waste originates.	§61.356(b)(1)	
Material Origin Designation	Determine whether the piece of equipment where the material/potential waste originates is a process vessel or waste management unit.	§61.356(b)(1)	
Stream Type	Indicate the type of stream. The choices are: process wastewater, product tank draw down, landfill leachate, or other.	§61.356(b)(1), §61.357(a)(3)(ii)	
Water Content	Indicate the fraction of water in the stream. This is a qualitative determination. Remember that streams that ultimately commingle with water to be greater than 10% water should be denoted as >10% water.	§61.356(b)(1), §61.357(a)(3)(i)	
Phase Comments	Provide the basis for the determination of the fraction of water in the stream.	§61.356(b)(1)	
Low Concentration Exemption	Document if the stream qualifies for the less than 10 ppmw benzene exemption. The value based on the stream flow weighted benzene concentration.	61.342(c)(2)	
Stream Flow Weighted Benzene Concentration	This value should be calculated based on the fraction water and oil in the waste stream and the benzene content of each phase and may be used to determine if the stream qualifies for the less than 10 ppmw benzene exemption in 61.342(c)(2). In addition, consider that the arithmetic average is not always the flow-weighted annual average.	§61.356(b)(1)&(6), §61.357(a)(3)(v)	
Aqueous Phase Benzene Concentration	Minimum	Document the minimum benzene concentration expected or measured in the aqueous phase.	§61.356(b)(1), §61.357(a)(3)(iv)
	Maximum	Document the maximum benzene concentration expected or measured in the aqueous phase.	§61.356(b)(1), §61.357(a)(3)(iv)
	Flow Weighted Average	Document the flow weighted average benzene concentration expected or measured in the aqueous phase.	§61.356(b)(1)&(6), §61.357(a)(3)(v)
	Basis	Document the basis for the benzene concentration data used for the previous three entries. Refer to referenced data tables or sampling data as appropriate.	§61.356(b)(1)&(6)



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Aqueous Phase Flow Rate		Document the flow rate for the aqueous phase of the stream.	§61.357(a)(3)(iii)
Aqueous Phase Flow Basis		Document the basis for the determination of waste quantity. Use specific numbers, calculation methodologies, or references to the external information or data. For example: The water boot on this vessel is drained manually once per shift. An operator estimated that 5 gallons were drained per event. Therefore, the total waste flow per day for this stream, assuming two shifts per day, is 5 gal/shift x 2 shift/day = 10 gal/day.	§61.356(b)(1), §61.356(2)(i)&(6), §61.357(a)(3)(iii)
Aqueous Phase Benzene Quantity (Mg/yr)		Calculate benzene quantity based on the information provided in previous columns.	§61.356(b)(1), §61.356(2)(i)&(6), §61.357(a)(3)(iii)
Organic Phase Benzene Concentration	Minimum	Document the minimum benzene concentration expected or measured in the organic phase.	§61.356(b)(1), §61.357(a)(3)(iv)
	Maximum	Document the maximum benzene concentration expected or measured in the organic phase.	§61.356(b)(1), §61.357(a)(3)(iv)
	Flow Weighted Average	Document the flow weighted average benzene concentration expected in the organic phase.	§61.356(b)(1)&(6), §61.357(a)(3)(v)
	Basis	Document the basis for the benzene concentration data used for the previous three entries.	§61.356(b)(1)&(6)
Organic Phase Flow Rate		Document the flow rate for the organic phase of the stream.	§61.356(b)(1), §61.356(2)(i)&(6), §61.357(a)(3)(iii)
Organic Phase Density		Document the density/specific gravity of the organic phase of this stream. Where density data is not available it is often prudent to use the density of water (or s.g. = 1) as a conservative estimate.	§61.356(b)(1), §61.356(2)(i)&(6), §61.357(a)(3)(iii)
Organic Phase Flow Basis		Document the basis for the determination of waste quantity. Use specific numbers, calculation methodologies, or references to external information or data. It is often prudent to assume an organic "carry under" for each stream to account for emulsions and coriolis effects. A common assumption is 1% of the water quantity. However, it is important to use defensible process data when available.	§61.356(b)(1), §61.356(2)(i)&(6), §61.357(a)(3)(iii)



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Organic Phase Benzene Quantity (Mg/yr)	Calculate benzene concentration based on the information provided in previous entries.	§61.356(b)(1), §61.356(2)(i)&(6), §61.357(a)(3)(iii)
Date of Last Benzene Concentration Review	Demonstrate at least once per year that the control exempted waste streams are either less than 10 ppmw flow-weighted annual average benzene concentration. Describe and date the method used to confirm the benzene concentration. This only applies to the 2 Mg compliance option.	§61.342(c)(2)
Description of Last Benzene Concentration Review	Examples: Process Knowledge Analytical Analysis NOTE: This is specific to 2 Mg	§61.342(c)(2)
TAB (Mg/yr)	Calculate the total annual benzene contribution of the stream if it is a point of generation "POG".	§61.342(a)
2 Mg/yr Exempt (Mg/yr)	Calculate the total annual benzene contribution of the stream if it is part of the 2BQ exemption.	§61.342(c)(2)
6 Mg/yr Exempt (Mg/yr)	Calculate the total annual benzene contribution of the stream if it is part of the 6BQ exemption.	§61.342(e)
BQ <10 ppmw (Mg/yr)	Calculate the total annual benzene contribution of the stream if it is a point of generation and meets the less than 10 ppmw benzene concentration exemption. This only applies to 2 Mg exemption. List to document the negative applicability.	§61.342(c)(3)(ii)(B)