

Nebraska Department of Water, Energy, and Environment

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Air Toxics Notebook

Ethylene Manufacturing Process Units (Heat Exchange Systems & Waste Operations)

eCFR 40 CFR Part 63 Subpart XX

40 CFR Part 63 Subpart XX	Ethylene Manufacturing Process Units (Heat Exchange Systems & Waste Operations)
Amendment Dates	07/06/2020 04/13/2005 07/12/2002
Am I Subject to this subpart?	I. This subpart applies to: (A) Affected sources at ethylene production units subject to NESHAP YY that are Major Sources of HAPs*. (B) Affected sources: (1) Heat exchange systems; (2) Waste streams. (C) Target HAPs: (1) Benzene; (2) 1,3-Butadiene; (3) Cumene; (4) Hexane; (5) Naphthalene; (6) Styrene; (7) Toluene; (8) Xylene (o-,m-,p-). *Major Sources of HAPs emit or have the potential to emit: (1) ≥ 10 tons/year of any single HAP; or (2) ≥ 25 tons/year of total HAPs. Area Sources emit less than Major Sources. II. Not subject to this subpart: (A) Heat exchange systems that meet any of the following criteria: (1) Operates with the minimum pressure on the cooling water side at least 35 kPa greater than the maximum pressure on the process side;

	(2) Contains an intervening cooling fluid containing less than 5% by weight of total target HAPs between the process and the cooling water. This intervening fluid must serve to isolate the cooling water from the process fluid and must not be sent through a cooling tower or discharged; (3) Once-through heat exchange systems subject to a NPDES permit with an allowable discharge limit of 1 ppmv or less above influent concentration, or 10% or less above influent concentration, whichever is greater; (4) Once-through heat exchange systems subject to a NPDES permit that meets all of the conditions in 63.1084(d)(1)-(4); (5) Recirculating or once-through heat exchange systems that cool process fluids that contain less than 5% by weight of total target HAPs. (B) Wastes in the form of gases or vapors that are emitted from process fluids; (C) Wastes that are contained in a segregated storm water sewer system.
Related Rules	NESHAP - 40 CFR Part 63 Subpart SS - Close Vent Systems Subpart TT - Equipment Leaks Level I Subpart UU - Equipment Leaks Level II Subpart WW - Storage Tanks Level II Subpart YY - Generic MACT
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