

**To:** Ethanol Producer with ICM process  
**From:** Bill Roddy and Andrea Foglesong, ICM  
**Date:** February 2, 2010  
**Subject:** Applicability of **Subpart VVVVVV** to Typical ICM Dry Mill Ethanol Plants

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ICM ethanol plants are classified under NAICS code 325193 (old 2869 SIC code), Industrial Organic Chemical (ethyl alcohol). Subpart VVVVVV (40 CFR Part 63, Final Rule published October 29, 2009) applies to dry mill ethanol plants based on the definition of Chemical Manufacturing Process Unit (CMPU) which includes all CMPU process equipment (vessels, etc.), thereby qualifying it as an “area” source of HAPs. An area source is one that has process vents or fugitive emissions that release to atmosphere. It is important to note that the State of North Dakota and US EPA were contacted and ICM was advised that only the HAPs listed in Table 1, outlined in 40 CFR Part 63, are to be considered for applicability purposes. For the purpose of this regulation, no other HAPs are considered.

**The ethanol plant must meet all three (3) of the following to be subject to Subpart VVVVVV:**

1. Uses a feedstock, produces a byproduct or product containing any HAP listed in Table 1 of the regulation.  
Answer: **Yes - Acetaldehyde**
2. The CMPU is an area source.  
Answer: **Yes – The ethanol plant qualifies as an area source at a CMPU**
3. a. The HAP is present in the process fluid at concentrations greater than 0.1% for carcinogens  
Answer: **No—Acetaldehyde is estimated to be 0.001% maximum**  
b. The HAP is present in the process fluid at concentrations greater than 1.0% for non-carcinogens  
Answer: **No—No other non-carcinogenic HAPs listed in Table 1 are present in the process stream.**

*\*\*Acetaldehyde is the only chemical listed in Table 1 that is present in the process fluid.\*\**

**Conclusion:**

- While the intent of the regulation is clearly to control process vents from chemical manufacturing units, as written, the rule exempts ICM’s ethanol plants.
- Therefore, per item 3a and 3b, the rule is not applicable to ICM ethanol plants.

**Compliance Requirements:**

- None (for non applicable ICM plants).
- No EPA notification is required due to non applicability of the rule.
- A state may require an applicability determination by the plant as proof with possible testing of process concentrations (fluids and vapors).