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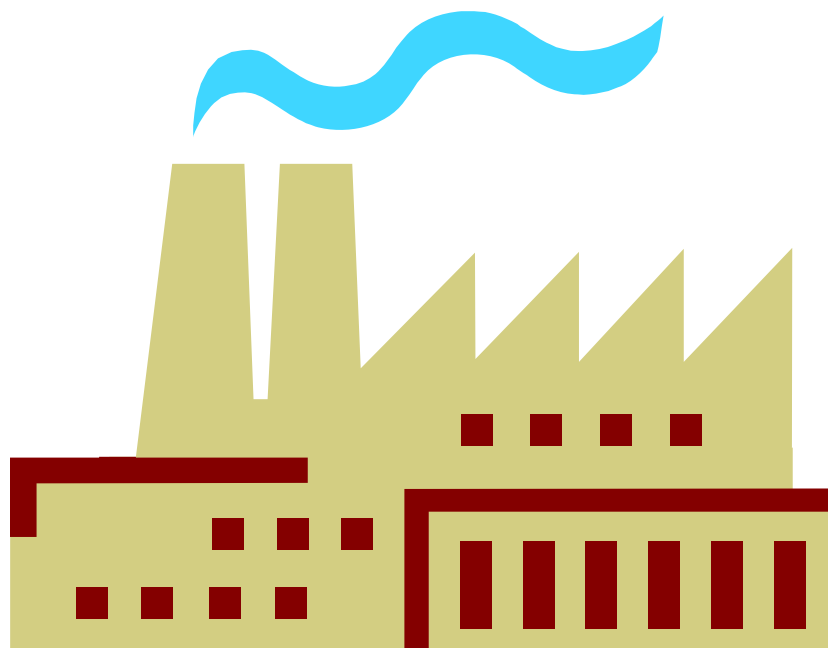
Session 3 Continued – Answers to Case Studies Questions



Booz | Allen | Hamilton

PLC

Pretty Large Chemical, LLC



Overview of PLC and RCRA AA/BB/CC

- ▶ Not Subject to Subpart AA
 - Treatment only occurs in the BIF
 - Other process vents are part of the production process – exempted from RCRA AA (AA2)
 - See 264.1030(e)



Overview of PLC and RCRA AA/BB/CC

- ▶ Subject to Subpart BB?
 - Part of facility is covered under LDAR requirements of HON rule (40 CFR 63 Subpart H)
 - 264.1064(m) exempts facilities that comply with NSPS (40 CFR 60), NESHAP (40 CFR 63) or MACT rules on LDAR
 - Thus, portions of the facility are exempt from RCRA BB, provided that it keeps appropriate documentation. Facility will need to clearly delineate the components covered under CAA requirements vs. under RCRA BB.



Overview of PLC and RCRA AA/BB/CC

- ▶ Subject to Subpart CC?
 - Facility stores wastes > 500 ppm
 - Subject to RCRA CC
 - Controls permitted and operated under CAA rules (e.g., MACT) are exempt from requirements of RCRA CC per 264.1080(b)(7)



Process No. 1

- ▶ T-1104 is fixed roof, $> 75\text{m}^3$, stores toluene and methanol-containing still bottoms
 - Level 1 tank since tank is $> 151\text{m}^3$ and stores a material > 4 psi (100% MeOH)
 - RCRA CC Permit application codes O-1, O-4, O-5a, O-5b(1), O-5e, O-13, O-14, O-14(a)(2)
- ▶ Exempt from RCRA BB since HON/MACT apply



Process No. 1

- ▶ How to address overlap of RCRA AA/CC and control device operation under MACT?
 - Control device is shared with MACT affected units. The exemption of 264.1080(b)(7) be used to exempt the control device from RCRA CC requirements
 - RCRA AA does not apply to process #1 since a RCRA permit is not required (see 264.1030(b)(1))

YZ1



Slide 7

YZ1

264.1080(b)(7) is part of Subpart CC. Here you are talking about overlap with Subpart AA. If you want exemption, should you use 264.1030(e) in AA?

Also, 264.1030(b)(1) says that AA apply to the unit that requires RCRA permit under 40 CFR 270 (i.e., RCRA permit). Process #1 itself does not require RCRA permit. That should be a key point to make.

Yousheng Zeng, 3/17/2008

Process No. 2

- ▶ Tank T-106 is 2,000 gal, fixed roof
- ▶ Tank is subject primarily to HON and other NESHAP / MACT rules since the majority of benzene is on-spec and sold as a product
 - Primary purpose of the tank is to store benzene product, not benzene waste.
- ▶ Therefore, tank is exempt from RCRA CC
 - Permit application code O-1
- ▶ Exempt from RCRA BB since HON/MACT applies



Process No. 3

- ▶ Spent activated carbon as waste
- ▶ 55 gal drums are Level 1 Containers due to size
 - Comply by using DOT-rated drum
- ▶ Roll-offs are either Level 1 or Level 2
 - Level 1 if organic waste is < 30% weight
 - Level 1 Index O-8a(2), O-9a(1), O-10a
 - Level 2 if organic waste is > 30% weight
 - Level 2 Index O-8b, O-9b(1),(2) or (3), O-10b



Process No. 4

- ▶ Spent caustic from benzene storage
- ▶ Stored in 55 gallon drums
 - Level 1 container due to size
 - Complies with requirements by being DOT rated drum
- ▶ RCRA CC Indexes O-8a(1), O-9a(1)or(2), O-10a
 - However, if NESHAP FF applies, Process No. 4 is exempt from RCRA CC



BIF Process

- ▶ Blend Tanks T-4101/4102
 - Level 2 due to size (< 19,812 gal / 75m³) and vapor pressure (< 11.1 psig / 76.6 kPa)
 - Fixed roof and connection to vent control system
- ▶ BIF Feed Tank T-4105
 - Level 2 due to size (< 19,812 gal) and vapor pressure (< 11.1 psig)
 - Fixed roof and connection to vent control system
- ▶ Indexes O-4, O-5a, O-5b(2)(3), O-5f(3)



BIF Process

- ▶ RCRA BB will apply since process is not covered under HON or other CAA rule
 - Indexes BB1, BB3, BB6, BB9-25, BB43-46, BB52, BB53-92, BB 110-175, BB176(?), BB177-182
- ▶ Tank vents controlled by thermal oxidizer that is covered under MACT rules, so RCRA AA does not apply.



