**Florida Department of**

# Environmental Protection

## Memorandum

**TO:** Rick Bradburn
**THROUGH:** Armando I. Sarasua, P.E.
**FROM:** Angelia Jackson
**DATE:** June 7, 2012
**SUBJECT:** Evaluation Summary for Pall Corporation, Pall Membrane Technology Center, 0330127-014-AF, Escambia County

We recommend issuing a Federally Enforceable State Operating Permit to Pall Corporation to operate their Pall Membrane Technology Center. This is a renewal of Permit 0330127-009-AF, effective February 12, 2007 and incorporates Permits 0330127-010-AC, issued September 16, 2008; Permit 0330127-011-AC, issued June 12, 2009; and 0330127-012-AC, issued January 7, 2010. Construction of the R&D Process Line authorized by 0330127-013-AC, effective March 23, 2011 is not complete.

This renewal includes process changes from ACs 010, 011 & 012, and name changes for EUs 012, 014, 015, 016 & 017. The permittee requested a maximum incineration rate of 265 lb/hr for EU 010 (RTO #1) and EU 016 (RTO #2) combined, because any of the emission sources can be routed interchangeably to either RTO. This request will not result in an increase of actual VOC emissions.

**Process Description**.
This facility manufactures various filtration devices for pharmaceutical and industrial uses. The operation consists of different process lines: Fabric coating, Membrane casting, Mixing, Membrane finishing and Polymer extrusion. VOC and HAP emissions are capped to escape major Title V classification.

**Pollution Control Equipment.**
VOC and HAP emissions from the process areas are controlled by regenerative thermal oxidizers (RTO). Particulate emissions from the mixing area are controlled by a baghouse. A scrubber serves the PFC-4 process line to control formic acid.

**Environmental Impact**.

| Airborne Contaminant Emitted | FAC Rule | Estimated Emissions | | Allowable Emissions | |
|---|---|---|---|---|---|
| | | lbs/hr | T/yr | lb/hr | T/yr |
| PM | N/A | N/A | 0.14 | N/A | <100 |
| VOC | N/A | N/A | 58.5 | N/A | <100 |
| HAPs (total) | N/A | N/A | 3.24 | N/A | <25 |
| HAPs (Individual) | N/A | N/A | N/A | N/A | <10 |
| Objectionable Odors | 62-296.320(2) | N/A | N/A | None allowed off plant property | |
| VE[2] | N/A | N/A | N/A | Not more than 5% opacity | |

**Applicable Rules & Regulations.**
There are no source-specific VOC or HAP lbs/hr limitations on the processes controlled by the RTOs. A VE test is required for the RTOs by Rule 62-296.401(1)(a), F.A.C. Facility emergency engines became subject to 40 CFR 63 Subpart ZZZZ and/or 40 CFR 60 Subpart IIII; for area sources due to new rule adoption.

**Compliance Monitoring.**
VOC and VE emissions testing required. VOC and HAP emissions are verified by recordkeeping and calculations.

**Compliance History**.
**2011- 2008** Department inspections noted the facility "In Compliance." August 6, 2008 – Inspection of the facility noted a status of "In Compliance." On August 28, 2008 facility received a status of "Minor Non-Compliance"; the facility reported RTO malfunction, shutdown and excess emissions. A warning letter was issued October 10, 2008 due to excess emissions while RTO was shut down.

**July 2007** – Facility received Minor Non-Compliance status for baghouse pressure drop. Warning letter issued in August 2007. The case was closed with compliance without formal enforcement. October 2006, a warning letter issued to Pall Membrane regarding EU 010 – stack test report received by the Department 58 days after testing and EU 015 report received 57 days after testing. November 2006 – A penalty was assessed to Pall and the case was closed out.

**Fee Summary**. This is an AF2B [$1,000 fee (x3) = $3,000] minor source with no stack test.
This is also an AF2A [$1,500 fee (x2) = $3,000] minor source with stack test and an AF2C [$750 fee (x2) = $1,500] minor source no sample all = $7,500.

AJ/c