Minor Modification/Local Construction
and
Significant Modification Statement of Basis

Oracle Flexible Packaging, Plant 604
Permit #00466-TV-16 (Minor modification/Local construction)
and
Permit #00466-TV-17 (Significant modification)

June 13, 2006

Processing

The changes requested in the permit application received on May 30, 2006 will initially be processed as a minor modification and local construction permit under Rules 3Q .0515 and 3Q .0300. Concurrently, a separate air quality permit will be processed as a significant modification in accordance with Rule 3Q .0516 of the Forsyth County Air Quality Technical Code. This second Draft operating permit will go through a 30-day public comment concurrent with a 45-day review by the U.S. EPA prior to final approval.

The applicant requested a construction permit be issued first to allow construction to begin prior to going through the public comment period and the subsequent review by the U.S. EPA for the significant modification. The Department has approved of this request and will issue a Minor modification construction permit and then the Significant modification TV operating permit.

Permit #00466-TV-16 will be issued first as a Minor modification. Part II of this permit (construction section) will allow for the construction of a new enclosed hard chromium electroplating tank project and a ten-station rotogravure printing press P-19 project. However, only the hard chromium electroplating tank project equipment will appear in Part I (operation section). Operation of the rotogravure printing press P-19 project will not be authorized until completion of the public comment period and the U.S. EPA review period have been completed for the Significant modification

Subsequent to the issuance of this construction permit, the Significant modification permit (#00466-TV-17) will be drafted to include operating language for rotogravure printing press P-19 project. This Draft permit will go through a 30 day public comment period followed by a 45 day review by the U.S. EPA prior to final approval. The proposed modification involves a Prevention of Significant Deterioration (PSD) avoidance condition for P-19, thereby requiring that it be processed as a significant modification.

In addition to this Significant modification, the unshielded changes listed in Part I, Section 1 “Operating conditions not covered under the permit shield”, will be open for public and U.S. EPA review and

comment under Rule 3Q .0516.

This Statement of Basis will cover both the Minor modification/local construction permit (TV-16) and the Significant modification for the operation of P-19 (TV-17).

Modification Summary

The applicant submitted two proposed projects with this application.

The first project involves the replacement of the existing enclosed hard chromium electroplating tank (ID No. ES604-061) with a similar unit (ID No. ES604-080). The existing composite mesh-pad system (ID No. CD604-003) will remain on site to control emissions from the new tank. This tank is subject to the Maximum Achievable Control Technology (MACT) standards under 40 CFR 63, Subpart N as is the existing tank. The current permit conditions will not change as a result of replacing this tank. However, the applicant will be required to perform a performance test to demonstrate compliance with the MACT emission standard for total chromium. An initial performance test was conducted in April, 1998 to demonstrate compliance for the existing tank. The MACT regulations require a new test for any new tanks subject to this rule.

The second project involves relocating a ten-station rotogravure printing press P-19 (ID No. ES604-081) from the applicant's Plant 200 facility to Plant 604. P-19 is to replace rotogravure printing press P-09 that was shut down in 2004. P-19 will be located in the space left vacant by P-09 at Plant 604. The emissions from this source will be routed to the existing regenerative thermal oxidizers (ID Nos. CD604-006 through 008). P-19 currently has a permanent total enclosure and the application includes a modification to construct a permanent total enclosure around the stations of P-19 at the new location also. The applicant provided information on the most representative consecutive two-year actual average emissions from P-09 over the past ten years to compare to the future potential emissions of P-19 to determine if the emissions from P-19 are greater than the prevention of significant deterioration (PSD) significant level of 40 tons per year for VOC. The applicant has requested a limit be included in the permit for the volatile organic compound (VOC) emissions to avoid the PSD regulations.

This statement of basis will be divided into two parts each covering the requirements for the specific proposed projects.

ENCLOSED HARD CHROMIUM ELECTROPLATING TANK (ES604-080) PROJECT:

Maximum Available Control Technology (MACT)

The new enclosed hard chromium electroplating tank (ES604-080) is subject to Subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks). This proposed tank is replacing a similar tank at the facility, which was also subject to Subpart N. All of the requirements in the current permit will remain the same when the new proposed tank is installed. A permit condition added to the Part II (construction section) that requires the applicant to conduct a performance test to demonstrate compliance for the emissions of total chromium from the new tank. Permit conditions will also be included to require notification to the Department 60

days prior to conducting the performance test and to provide the Department with the test results within 90 days following the test along with a Notification of Compliance Status.

The applicant shall not allow the concentration of total chromium in the exhaust gas stream discharged to the atmosphere to exceed 0.015 mg/dscm (6.6×10^{-6} gr/dscf). This is the same emissions limit that is in place for the tank to be replaced. The applicant conducted an initial performance test in April, 1998 for the tank being replaced. The test resulted in emissions of total chromium of 0.0063 mg/dscm, which demonstrated compliance with the allowable limit. The existing tank is being replaced with a similar tank and the control device will remain the same. It is expected the emissions from the new tank will be below the allowable limit. The permit will be issued with a condition for the applicant to perform a performance test to demonstrate compliance with the allowable emission limit for total chromium.

The new tank has a maximum rectifier capacity of 5,000 amp-hrs and it is the only tank with a rectifier at the facility. The facility meets the definition of a small, hard chromium electroplating facility as defined in 40 CFR 63.341. This rule defines a small, hard chromium electroplating facility as a facility that performs hard chromium electroplating and has a maximum cumulative rectifier capacity less than 60 million amp-hr/yr. At 5,000 amp-hrs, this facility has a maximum cumulative rectifier capacity of 43,800,000 amp-hr/yr (ie. 5,000 amp-hr x 8,760 hr/yr). The allowable concentration of total chromium in the exhaust gas stream discharged to the atmosphere from an enclosed hard chromium electroplating tank shall not exceed 0.03 mg/dscm (1.3×10^{-5} gr/dscf). This limit is higher than the allowable limit for a tank located at a large, hard chromium electroplating facility (0.015 mg/dscm). The Department will issue the Minor modification permit (#00466-TV-16) with the more restrictive limit (0.015 mg/dscm) and will relax this limit to 0.03 mg/dscm in the processing of the Significant modification permit (#00466-TV-17).

Compliance Assurance Monitoring (CAM)

CAM requirements apply to pollutant-specific emission units (PSEU's) whose emissions are routed through a control device and whose uncontrolled emissions are greater than the threshold for determining the source as a major facility. In this case, the pollutant threshold is 10 tons per year of total chromium emissions. The total chromium emissions from ES604-080 are exhausted to the composite mesh-pad mist eliminator (ID No. CD604-003). However, the uncontrolled potential emissions of total chromium are less than 10 tons per year (0.38 tons per year). Therefore, ES604-080 is not subject to CAM.

Particulate matter emissions and control of visible emissions from the electroplating tank:

The emissions from the enclosed hard chromium electroplating tank (ES604-080) are subject to Rules 3D .0515 (Particulates from Miscellaneous Industrial Processes) and 3D .0521 (Control of Visible Emissions). Operation of the source under the MACT requirements assures compliance with these standards. No monitoring, recordkeeping, or reporting is required to assure compliance.

ROTOGRAVURE PRINTING PRESS (P-19) PROJECT:

Maximum Available Control Technology (MACT)

The new press P-19, as well as most of the existing equipment at the facility, is subject to Subpart KK (Printing and Publishing MACT) of 40 CFR Part 63. This MACT provides numerous options for demonstrating compliance. The applicant has used the mass balance option to demonstrate compliance at

this facility. All of the requirements of the MACT are already listed in the permit and P-19 will be subject to the existing permit language. The permit was modified to include P-19 as another emission source subject to these rules. No new monitoring or recordkeeping requirements have changed as a result of adding P-19. A requirement to have the permanent total enclosure around P-19 tested within 180 days of startup of the unit to ensure compliance with EPA Method 204 will be added to Part II of the permit.

Another possible MACT requirement for P-19 is Subpart DDDDD (Industrial, Commercial, and Institutional Boilers, and Process Heaters MACT). The drying ovens on P-19 are considered process heaters however, the definition of process heaters in 40 CFR 63.7570 of the MACT excludes direct-fired units from the MACT. The drying ovens on P-19 and all the other dryers at the facility are the direct-fired type. Direct-fired means the products of combustion come into direct contact with the process materials as opposed to an indirect-fired unit where the products of combustion do not come into contact with the process materials. Therefore, P-19 is not subject to Subpart DDDDD.

Prevention of Significant Deterioration (PSD) Avoidance

This entire facility has potential VOC emissions greater than 250 tons per year (tpy) and is considered a major facility under the PSD program. Any modifications at the facility must undergo PSD permitting if the modification results in potential VOC emissions greater than the PSD significance level (40 tpy). The uncontrolled VOC emissions from the proposed modification are greater than the PSD significance level of 40 tpy for VOC emissions from major facilities. The permittee has requested a limit on VOC emissions be included in the permit to avoid PSD review. Compliance with this limit will be determined based on monthly calculations considering the materials applied.

This modification involves the replacement of press P-09 (removed in 2004) with press P-19 (relocated from Plant 200). The applicant supplied information in the application for the two-year actual average emissions from press P-09 to determine the baseline emissions. The applicant used the actual emissions from calendar years 1998 and 1999 to represent the baseline emissions from press P-09. The VOC emissions from press P-09 in 1998 were 88.7 tons per year and the VOC emissions in 1999 were 79.9 tons per year. The two-year actual average emissions for this period are 84.3 tons per year and represent the baseline emissions from P-09. Therefore, in order to avoid PSD permitting, the applicant has requested a PSD avoidance limit for VOC emissions from P-19 as the baseline emissions from P-09 plus 39.9 tons per year (less than PSD significance level). This results in a PSD avoidance limit of 124.2 tons per year for VOC emissions from press P-19.

The actual VOC emissions from press P-19 in its current location at Plant 200 were less than 10 tons per year for each of the previous two years. It is assumed the facility will be able to demonstrate compliance with the new PSD avoidance limit of 124.2 tons per year.

Emissions from P-19 will also be subject to the facility-wide PSD limit of 4,738 tons per year. This PSD cap was established in the past and explained in the original TV permit statement of basis as a PSD cap. The facility has demonstrated compliance with this limit in the past and the emissions from the addition of P-19 will not cause this limit to be exceeded.

Compliance Assurance Monitoring (CAM)

CAM requirements apply to pollutant-specific emission units (PSEU's) whose emissions are routed

through a control device and are located at a TV facility. The emissions from P-19 are exhausted to the three existing regenerative thermal oxidizers (ID Nos. CD604-006 through 008). P-19 is be subject to CAM. The current permit lists the CAM requirements for equipment routed to the regenerative thermal oxidizers. P-19 will be referenced in these conditions and they will not change as a result of the addition of this press.

Emissions from the combustion of natural gas (and/or propane) in the dryers

The emissions from the combustion of natural gas and/or propane in the ovens, or dryers, associated with the printing stations on P-19 are subject to Rules 3D .0515 (Particulates from Miscellaneous Industrial Processes), 3D .0516 (Sulfur Dioxide Emissions from Combustion Sources), and 3D .0521 (Control of Visible Emissions). The combustion of only natural gas and/or propane in the dryer assures compliance with these standards. No monitoring, recordkeeping, or reporting is required to verify compliance, however, the applicant must keep adequate records to determine the actual emissions for purposes of the annual emissions inventory.

Other facility-wide Issues:

Toxic Air Pollutants (TAP)

This facility underwent a facility-wide TAP demonstration including modeling in May, 2005. The modeling results were approved by the Department in October, 2005 and the resultant emissions were included in Air Quality Permit #00466-TV-15. Condition 4.1(D) of that permit states "[i]n accordance with Rule 3Q .0701(c), for the 5 year period beginning on October 11, 2005 modifications which increase the facility-wide emissions of, or which relocate an existing emission source of any TAPs listed in the table in permit condition **4(C)** are allowed without further modeling analysis by the permittee except that actual emissions may not increase above those emissions rates listed in that table without first applying for and obtaining a permit.

The TAP emissions associated with this modification do not include any new TAPs from those already evaluated in the modeling demonstration. Therefore, in accordance with permit condition 4.1(D), no TAP demonstration is required for this modification.

Administrative and other changes to Air Quality Permits #00466-TV-16 and TV-17

These are changes made to the permits as a result of the modifications and permit processing options:

TV-16:

1. Part II of the permit has been modified to include the Enclosed Hard Chromium Electroplating Tank (ES604-080) and Rotogravure Printing Press (ES604-081) Projects (for this modification). These projects appear in Section 1 "APPROVAL OF CONSTRUCTION ACTIVITIES". Conditions **3.2 and 3.3** have been added to Section 3 "SPECIFIC LIMITATIONS AND CONDITIONS" to list the specific notification, operation, and performance testing requirements for these projects. Note that condition **3.2(D)** authorizes operation of the Enclosed Hard Chromium Electroplating (ES604-080) Project. However, condition **3.3(D)** prohibits operation of the Rotogravure Printing Press

(ES604-081) Project until Part I of the permit is modified in accordance with 3Q .0500 to include the listed air emission source. This Project is not authorized to operate until Part I of the permit is changed to include this equipment in the operating permit. This change to the permit will occur after a 30-day public comment period followed by a 45-day review by the U.S. EPA.

2. Modified the Header on each page to reflect the new permit number (00466-TV-16) and the effective date in Part I and Part II of the permit.

3. Added the Enclosed Hard Chromium Electroplating Tank (ES604-080) Project to the table labeled "Operating conditions not covered under the permit shield" on page 3 of the revised permit.

4. Replaced all references to the enclosed hard chromium electroplating tank (ES604-061) with the new tank identification number (ES604-080) in condition **3.2** of Part I of the permit. Also replaced all references to the old tank with the new tank in the Table of Contents and the equipment identification list in Section 1 of the permit.

TV-17 (in addition to changes made to TV-16):

1. Modified the Header on each page to reflect the new permit number (00466-TV-17) and the effective date in Part I and Part II of the permit.

2. Added the new rotogravure printing press P-19 (ES604-081) to the equipment list in the Table of Contents and to the equipment identification list in Section 1 of the permit.

3. Added P-19 to Section **3.1** (Specific Limitations and Conditions) and to Table 3.1 identifying the PSD avoidance limit, the VOC work practice standards, and opacity limits.

4. Added P-19 to conditions **3.1(A)(3), (d)(i), (d)(iii), (d)(iii)(e), (d)(iii)(h), and (d)(v)**.

5. Added P-19 to the facility-wide PSD avoidance limit standard of 4,728 tons of VOC per year in condition **3.1(B)(1)(a)** of the permit.

6. Added P-19 to condition **3.1(B)(3)(k) and (l)** of the permit.

7. Added P-19 to the CAM requirements in condition **3.1(B)(6)**.

8. Replaced condition **3.1(K)** (VOC work practice standards) with the PSD avoidance condition for P-19. Changed the conditions for the VOC work practice standards from **3.1(K)** to **3.1(L)**.

9. Modified condition **3.1(L)** to state source located inside of the PTE on P-19 are not subject to the VOC work practice standards.

10. Changed the reference to condition **3.1(L)(4)** from **(K)** to **(L)**.

11. Changed the allowable total chromium concentration in condition **3.2(A)(1)** to 0.03 mg/dscm or 1.3×10^{-5} gr/dscf to reflect the appropriate emissions limitation for small, hard chromium electroplating facilities.

12. Modified condition **3.3(D)** in Part II of the permit to allow for construction **and** operation of the P-19 Project.

13. Removed the table labeled "Operating conditions not covered under the permit shield" because the permit, including the changes listed in this table, is to go through a public notice period and subsequent U.S. EPA review pursuant to Rule 3Q .0516 and all these conditions now are covered under the permit shield.

Statement of Basis Conclusions

The Department, upon completion of its review of this modification, has concluded that the facility will be in compliance with all applicable regulations and has drafted permit numbers **00466-TV-16**: (construction and operation of the Enclosed Hard Chromium Electroplating (ES604-080) Project and construction only for the Rotogravure Printing Press (ES604-081) Project and **00466-TV-17**: (operation permit), which detail all the necessary requirements to ensure compliance. The Department recommends approval of these TV permit modifications.