



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

**EMISSION OFFSET PROGRAM
FEDERAL EQUIVALENCE DEMONSTRATION**

Regulation 2-2-412

2018 Report for Calendar Year 2017

**Prepared by:
Greg Stone, Supervising Air Quality Engineer**

**Reviewed by:
Pamela Leong, Air Quality Engineering Manager**

Summary

This is the 2018 annual federal offset equivalence demonstration report required by Regulation 2, Rule 2, Section 412 (Reg. 2-2-412). This report covers calendar year 2017, and demonstrates the Bay Area Air Quality Management District (District) emissions offset program¹ is at least equivalent to federal offset requirements for major-NSR projects for the following non-attainment pollutants: precursor organic compounds (POC), oxides of nitrogen (NO_x), and PM_{2.5}.

In calendar year 2017, the District issued an Authority to Construct for a major modification of a major facility. This was for permit application 26437, Waste Management of Alameda County, Plant number 2066. For this application, Waste Management provided 124.99 tons per year of POC offsets at a 1.15:1.0 ratio, for a total of 143.7 tons per year of Emission Reduction Credits (ERCs). For this equivalence report, the District reviewed all banking certificates that were used to provide these ERCs, as discussed below. Since there were no adjustments necessary for these banking certificates, there is no offset shortfall for 2017. Therefore, the District offset program is at least equivalent to federal offset requirements.

Background

Federal offsets are required for all non-attainment pollutants from major-NSR projects, including new major facilities² and major modifications at major facilities³. As part of the District's New Source Review (NSR) program, emission offsets are required from both major and non-major facilities and modifications. Because federal requirements are somewhat different than District offset requirements in Reg. 2-2, the District is required to conduct this annual equivalence demonstration. Pursuant to Reg. 2-2-412⁴, the District is required to make an annual demonstration that the quantity of offsets provided for all new or modified sources, less adjustments to those offsets for federal purposes, exceed the quantity of offsets required under federal law for new major facilities and major modifications at major facilities.

Surplus at Time-of-Use Shortfall

Historically, The District has reviewed major-NSR offsets for equivalence by adjusting those ERCs at time of use, as necessary, based on prevailing RACT, NSPS and NESHAP rules at the time the ERCs are provided. Federal guidelines require Emission Reduction Credits (ERCs) to be real, permanent, quantifiable, enforceable, and surplus. To be surplus, ERCs are adjusted according to the following:

- A District rule that is required for federal attainment demonstration purposes;
- A District rule that has been approved into the State Implementation Plan (SIP);
- New Source Performance Standard (NSPS); and

¹ Regulation 2-2 as adopted on December 19, 2012 and approved by U.S. EPA as part of the State Implementation Program (SIP) on August 31, 2016 (81 FR 50339); and Regulation 2-4 as adopted on June 15, 1994 and approved by U.S. EPA as part of the State Implementation Program (SIP) on January 26, 1999 (64 FR 3850) Further amendments to Reg. 2-2 were adopted on Dec. 6, 2017 and have been submitted to EPA for approval.

² For the purposes of this demonstration, a major facility is a facility that has the potential to emit 100 tons per year or more of POC, NO_x or PM_{2.5}, excluding fugitive emissions unless one of the 28 listed source categories in 40 CFR 51.165(a)(1)(iv)(A)(1) & 51.165(a)(1)(iv)(C).

³ For the purposes of this demonstration, a major modification of a major facility is a modification at an existing major facility that will have a net emission increase of 40 tons per year of POC or NO_x, or 10 TPY of PM_{2.5}. (Regulation 2-2-218).

⁴ See Appendix A

- Maximum Achievable Control Technology (MACT) Standard⁵

The U.S. EPA recognizes that under the District program, ERCs generated at time of banking meet these federal guidelines. Since the District program does not adjust ERCs again at the time of use, EPA guidelines allow an alternative demonstration of offset equivalence for this type of *federal surplus-at-time-of-use shortfall*, as defined in Reg. 2-2-230.

Offset Baseline Shortfall

On December 6, 2017, the District revised Reg. 2-2 to include another category of equivalence adjustment for *federal offset baseline shortfalls*, as defined in Reg. 2-2-229. This type of shortfall occurs because District rules do not require the re-offsetting of an emission limit, once offsets have been provided for that emission limit. While the District disagrees that this is required under federal law, it is included as part of the Reg. 2-2-412 equivalence demonstration to address EPA's comments on the previous version of Reg. 2-2 that was adopted on Dec. 19, 2012.

Minor-NSR Offsets used for Equivalence

The District requires offsets beyond those required under federal law. Under federal law, offsets are required at a 1.15 to 1.0 ratio only for a new major facility or a major modification at an existing major facility. In addition to these federal requirements, the District requires offsets for minor-NSR projects at a 1.15 to 1.0 ratio for all facilities with a potential to emit (PTE) of 35 tons per year or more of NO_x or POC. The District also requires offsets at a 1.0 to 1.0 ratio for all facilities with a PTE between 10 and 35 tons per year of NO_x or POC. For this latter category, the District provides the POC and NO_x credits from the District Small Facility Banking Account (SFBA). Regulation 2-2-303 requires PM_{2.5} offsets at a 1:1 ratio for *any* emission increase at a major facility with PM_{2.5} emissions greater than 100 tons per year, not just for the major modifications required under federal law.

Because the District requires offsets beyond those required under federal law, those minor-NSR offsets can be used to cover an offset shortfall. Before using minor-NSR offsets in an equivalence demonstration, the District adjusts the minor-NSR offsets at time of use, similarly to the way we adjust major-NSR offsets to determine the surplus-at-time-of-use shortfall. A summary of the equivalence procedure is outlined in Appendix B.

Identification of New Major Facilities and Major Modifications

As indicated above, the District issued an Authority to Construct for a major modification under permit application 26437 for Waste Management of Alameda County, Plant number 2066. The Authority to Construct for this application was issued September 21, 2017. Waste Management offset the 124.99 tons per year of POC emission increase, at an offset ratio of 1.15:1.0, with 143.739 tons per year of POC ERCs using 4 banking certificates.

⁵ National Emission Standards for Hazardous Air Pollutants (NESHAPS) require application of technology-based emissions standards referred to as Maximum Achievable Control Technology (MACT). Post-1990 NESHAPS are also referred to as MACT standards.

Offset Equivalence Demonstration

Surplus-at-Time-of-Use Shortfall

Table 1 summarizes the four banking certificates used to offset emissions from the Waste Management project and the RACT/NSPS/NESHAP adjustments of the original ERCs for each banking certificate. The District reviewed original banking applications for these banking certificates to determine if additional reductions were needed, based on the RACT, NSPS and NESHAP rules in effect at the ERC time of use.

Table 1 – Waste Management AN 26437 POC Offset Summary with Equivalence Adjustments

Banking Cert.	ERCs Used (ton/yr)	Equivalence Reduction (ton/yr)	Original Banking Cert.	Original Banking App. No.	Original ERC Basis	Basis for Equivalence Adjustment at Time of Credit Use	Emission Reduction Location
1587	35.74	0.00	1423	26059	Shutdown of S-4 and S-6 Fuel consumption and bread dough production Baseline: 3/11 – 2/14 Reg. 8-42 (6/1/94)	No change to SIP rules affecting POC from commercial bakeries. SIP version of Reg. 8-42 at time of ERC use dated 6/1/94	Earthgrains Baking Oakland, CA
1589	10.134	0.00	1118	17288	Addition of new Catalytic Oxidizer on S-1 Baseline: 2/05-1/08 Reg. 8-42 (6/1/94)	No change SIP to rules affecting POC from commercial bakeries. SIP version of Reg. 8-42 at time of ERC use dated 6/1/94	Bimbo Bakeries USA So. San Francisco, CA
1597	74.0	0.00	1374	24574	Facility shutdown of coating and printing sources Baseline: 1/10 – 12/12 Condition # 23913 Reg. 8-20 (1/1/19/08)	SIP version of Reg. 8-20 at time of ERC use dated 3/3/99. NESHAP KK would not apply because Beamis was not a major facility for HAPs	Beamis Flexible Packaging Newark, CA
1602	23.865	0.00	1327	24085	Facility shutdown of expanded polystyrene foam cup/container and solvent cleaning sources Baseline: 2/09 – 1/12 Reg. 8-16 (10/16/02) Reg. 8-52 (7/7/99)	No change to SIP rules affecting POC from solvent cleaning or expanded polystyrene sources. SIP version of Reg. 8-16 at time of ERC use dated 10/16/02 SIP version of Reg. 8-52 at time of ERC use dated 7/7/99	New Wincup Holdings Inc. Corte Madera, CA
Totals:	143.739	0					

Because these banking certificates in Table 1 were issued relatively recently, there are no new District RACT regulations or federal NSPS and NESHAP rules that require further adjusting of these ERCs. Therefore, there is no Surplus-at-Time-of-Use shortfall for this reporting year. A summary of the adjustment analysis for each ERC banking certificate is provided in Appendix C.

Offset Baseline Shortfall

Amendments to District Regulation 2-2 were adopted by the District Board of Directors on Dec. 6, 2017. These amendments include the addition of the Offset Baseline Shortfall defined in Section 2-2-229. The District did not issue any Authorities to Construct or Permit to Operate for modifications at a major facility that resulted in an Offset Baseline shortfall between December 6 to 31, 2017. Therefore, there is no Offset Baseline shortfall to address in this equivalence report.

Conclusion

As discussed above, there are no surplus-at-time-of-use or offset baseline shortfalls for 2017. Therefore, it was not necessary to review any minor-NSR offsets to cover a shortfall. The District's offset program continues to be at least as stringent as federal requirements.

APPENDIX A

2-2-412 Demonstration of NO_x, POC and PM_{2.5} Offset Program Equivalence: By March 1 of each year, or by a later date approved by EPA, the APCO shall prepare and submit to EPA, and publish prominently on the District's website, an analysis demonstrating that the District's New Source Review program has obtained at least as many NO_x, POC and PM_{2.5} offsets in total as would have been required under the federal offsets provisions set forth in 40 C.F.R. section 51.165 for the Federal Major NSR Sources (as defined in Section 2-2-228) permitted by the District during the previous calendar year. The demonstration shall be based on the following information:

412.1 Calculation of Offsets Shortfall for Each Federal Major NSR Source: The APCO shall calculate the offsets shortfall for each Federal Major NSR Source permitted during the previous calendar year, which shall be the sum of the Federal Offsets Baseline Shortfall as defined in Section 2-2-229 (if any) and the Federal Surplus-at-Time-of-Use Shortfall as defined in Section 2-2-230 (if any).

412.2 Calculation of Total Offsets Shortfall for All Federal Major NSR Sources: The APCO shall sum the offsets shortfalls calculated pursuant to subsection 412.1 (if any) for all for all Federal Major NSR Sources permitted during the previous calendar year to obtain the total offsets shortfall for the year.

412.3 Identification of Equivalence Credits Sufficient to Cover Total Offsets Shortfall: The APCO shall identify Equivalence Credits sufficient to equal or exceed the amount of the total offsets shortfall calculated pursuant to subsection 412.2 (if any), subject to the following requirements.

3.1 The APCO shall not include any Equivalence Credits that were relied on in a prior equivalence demonstration for an earlier year.

3.2 All Equivalence Credits used in the equivalence demonstration must be adjusted to reflect any (i) District regulation required for purposes of federal attainment demonstration requirements, (ii) District requirement, or a state requirement applicable to sources within the District, approved into the California State Implementation Plan, or (iii) federal New Source Performance Standard or Maximum Achievable Control Technology Standard, that is adopted or promulgated between the date the Equivalence Credit was generated and the date it is used for purposes of the equivalence demonstration. The APCO shall make such adjustments in accordance with an EPA-approved surplus-at-time-of-use adjustment methodology.

2-2-229 Federal Offsets Baseline Shortfall: For purposes of the offsets equivalence demonstration provisions in Sections 2-2-412 and 2-2-415, the difference between:

229.1 The amount of offsets required for the Authority to Construct and/or Permit to Operate using the District's baseline calculation procedures under District Regulation 2, Rule 2; and

229.2 The amount of offsets that would be required under the federal baseline calculation procedures applicable under 40 C.F.R. section 51.165, including (but not limited to) the actual emissions baseline provision in 40 C.F.R. section 51.165(a)(3)(ii)(J).

A Federal Offsets Baseline Shortfall shall apply only in cases where (i) the amount of offsets required for the Authority to Construct and/or Permit to Operate is calculated using the baseline provision in Section 2-2-606.2 for modified sources for which offsets have previously been provided, and (ii) all of the previously-provided offsets

were provided more than five years before the completeness date of the application for the Authority to Construct and/or Permit to Operate.

- 2-2-230 Federal Surplus-at-Time-of-Use Shortfall:** For purposes of the offsets equivalence demonstration provisions in Sections 2-2-412 and 2-2-415, the difference between:
- 230.1 The amount of emission reduction credit provided in banking certificates surrendered in connection with an Authority to Construct and/or Permit to Operate in order to satisfy offsets requirements under Sections 2-2-302 and/or 2-2-303; and
 - 230.2 The amount of emission reduction credit that would be associated with the emission reductions for which the banking certificates were issued if the emission reduction credit calculation for each emission reduction under Sections 2-2-605 and 2-2-603 is performed using an adjusted baseline emissions rate pursuant to subsection 2-2-603.6 that is based on the most stringent of any of the following regulations that is in effect at the time the banking certificate is surrendered for use as an offset: (i) any District regulation required for purposes of federal attainment demonstration requirements, (ii) any District regulation, or state regulation applicable to sources within the District, approved into the California State Implementation Plan, or (iii) any federal New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants.

APPENDIX B

Summary of Equivalence Procedure

District staff will use the following procedure to determine offset equivalence. In the ensuing discussion, the term *major-NSR project* is used to collectively refer to a new major facility and a major modification of an existing major facility. This review is conducted for permits issued within calendar year for which the equivalence demonstration report is being prepared. If a major-NSR project was addressed in a previous report, that project does not need to be re-evaluated in the current report.

Determine Surplus-at-Time-of-Use Shortfall (2-2-230)

1. Identify any major-NSR project for NO_x, POC or PM_{2.5} that received an Authority to Construct or Permit to Operate (P/O) in the calendar year reporting period.
2. If there is no major-NSR project for the year, then there is no need to determine the Surplus at Time of Use Shortfall. Skip to Step 7.
3. For each major NSR project identified in the Step 1, review the permit application to determine banking certificate(s) that were used to provide any emission reduction credits in excess of the major facility or significant increase thresholds for NO_x, POC and PM_{2.5}.
4. For each banking certificate identified in Step 3, review the original banking application(s) for ERCs that were used to offset the major-NSR project. Determine the basis for the original ERCs, and any federally enforceable rules in effect at the *time of deposit*. Adjust the original ERCs for the following types of federally enforceable rules that were in effect at the *time of use* (when the A/C or P/O was issued for the major NSR project):
 - a. District rule that is required for federal attainment demonstration purposes;
 - b. New or modified District rule that has been adopted into the SIP;
 - c. New Source Performance Standard (NSPS) rule;
 - d. Maximum Achievable Control Technology (MACT) rule.
5. For each major NSR project, subtract the adjusted ERCs from the total offsets needed, to determine the surplus-at-time-of-use offset shortfall for that project.
6. Sum the surplus-at-time-of-use offset shortfalls for all major-NSR projects identified in Step 1 to determine the total surplus-at-time-of-use shortfall for the year.

Determine Offset Baseline Shortfall (2-2-229)

7. Identify any major-NSR project for a modified source that would result in an offset baseline shortfall for NO_x, POC or PM_{2.5}, as defined in Section 2-2-229.

8. For each project identified in Step 7, calculate the offset baseline shortfall based on the difference between the District and federal baseline procedures.
9. Sum the offset baseline shortfalls for all major-NSR projects identified in Step 7 to determine the total offset baseline shortfall for the year.

Determine Overall Shortfall

10. Combine the total shortfalls from Steps 6 and 9 to determine the overall shortfall for the reporting year.

Review non-Major NSR Offsets to cover Shortfall

11. Identify ERCs and contemporaneous on-site emission reductions⁶ that have been used to provide offsets for non-major NSR projects.
12. Adjust non-major NSR offsets following the same procedure in Steps 3 and 4 above to determine available *time-of-use adjusted* non-major offsets.
13. Equivalence is achieved when the amount of time-of-use adjusted offsets from non-major projects equals or exceeds the shortfall.

⁶ A contemporaneous on-site emission reduction is a verified reduction that has not been banked but would have qualified for banking.

Appendix C

Adjustments to ERC Banking Certificates used for Major-NSR Offsets

Waste Management Application 26437

Banking Certificate 1587 – Earthgrains Baking Companies, Inc., Certificate 1423

Banking Certificate 1589 – Bimbo Bakery USA, Certificate 1118

Banking Certificate 1597 – Bemix Flexible Packaging, Certificate 1374

Banking Certificate 1602 – New Wincup Holdings, Inc., Certificate 1327

Federal Offset Equivalence ERC Adjustments for B# 1587

These ERCs are for reductions that occurred at:
Plant Name: *Earthgrains Baking Companies, Inc.*
City: *Oakland*
PN: *532*
Original Banking Certificate No(s): *1423*
Original Banking Application No(s): *26059*

Summary of ERC Adjustments (TPY)

Pollutant	Original ERCs	Adjustment Reduction	Adjusted ERCs
POC	35.74	0	35.74
NOx	0.418		ND
PM _{2.5}	0.087		ND

ND = not determined

Background

This ERC adjustment review is based on a review of the banking application file (application number 26059), including the Engineering Evaluation Report (attached). This banking application was for the permanent shutdown of the following sources:

S-4 Bread Oven, 6.649 MM BTU/hr abated by A-5 Catalytic Thermal Oxidizer
S-6 Bun Oven, 4.2 MM BTU/hr

The majority of the POC Emission Reduction Credits (ERCs) were from the bread and bun baking operations. A minor amount of POC emission reduction (0.06 TPY) was due POC emissions from fuel combustion. ERC calculations were based fuel usage records and bread/bun production records for a 3-year baseline (Mar. 2011 – Feb. 2014). S-4 and S-6 were subject to District Regulation 8-42, Large Commercial Bread Bakeries. S-4 was subject to the emission control requirements of Section 8-42-303, which requires 90% overall POC reduction. S-6 was exempt from the emission control requirements of Section 8-42-303 by Section 8-42-112 for existing ovens emitting less than 250 pounds per day.

Banking Certificate 1423 was issued on August 19, 2014, and included 35.74 TPY of POC ERCs. All of those POC ERCs were used (via Banking Certificate 1587) as part of the POC offsets for Waste Management application 26437 on September 21, 2017.

BAAQMD Data Bank Information

Banking Application

Application: 26059 Trade Secrets (Y/N/?): ?

Plant number: 532
 Site number: A0532
 Plant name: Earthgrains Baking Companies, Inc
 Closed: 02/27/14
 Plant emissions: PM: 0.029 POC: 24.868 NOx: 1.388 SO2: 0.005 (tpy)
 Location: 955 Kennedy Street, Oakland, CA 94606
 UTM coordinates: 567.16 Longitude 4181.3 Latitude
 Project title: Banking: plant closure
 Plant contact: Jon Allen, Maintenance Manager
 Mailing address: 955 Kennedy Street, Oakland, CA 94606
 Telephone: (510) 436-5350 x204
 Engineer: Kevin Oei [1343]
 Folder : Scanned
 Received: 02/26/14 . . Completeness review due by: 03/19/14
 Complete: 02/26/14 Evaluation due by: 07/11/14

Final disposition: Grant/Issue 08/19/14 (archived record)
 Emission increase: none

Device No.: S-4 <a: 06/02/14>
 Description: BREAD OVEN, 6,694K BTU/HR
 Codes: Dis/Banking
 Condition No.: 5897 <<a>>
 Condition No.: 19934 <<a>>
 Final App Status: Canceled, 08/19/14 <<archived>>
 Current Status: Archived, 06/02/14

Device No.: S-6 <a: 06/02/14>
 Description: Bun Oven, 4,200 BTU/HR
 Codes: Dis/Banking
 Final App Status: Canceled, 08/19/14 <<archived>>
 Current Status: Archived, 06/02/14

Banking Certificate(s)

Banking Certificate: 1587

Application no: 28457
 Final Disposition: Certificate Issued 01/24/17
 Reduction Location: Earthgrains Baking Companies, Inc [Oakland]
 Certificate owner: [227] Waste Management of Alameda County, Inc.
 Contact: Barry Skolnick, tel: (925) 890-2746
 Mailing address: 293 Mountaire Pkwy, Clayton, CA 94517

Transfer from #: 1423
 Original cert.#: 1423

tons per year	PM25	POC	NOX	SO2	CO	NPOC
PM10						
Requested	.000	.000	.000	.000	.000	.000
.000						

Approved .000	.000	35.740	.000	.000	.000	.000
Applic:26437 Withdrawal .000	.000	35.740	.000	.000	.000	.000
<hr/>						
Balance .000	.000	.000	.000	.000	.000	.000

Banking Certificate: 1423

Application no: 26059
Final Disposition: Certificate Issued 08/19/14
Reduction Location: Earthgrains Baking Companies, Inc [Oakland]
Certificate owner: [208] Bimbo Bakeries USA
Contact: Kacey Fung, tel: (630) 310-2304
Mailing address: 8550 W Bryn Mawr Ave, Suite 1000, Chicago, IL 606
Email: kfung@bbumail.com

tons per year PM10	PM25	POC	NOX	SO2	CO	NPOC
Requested .090	.000	15.250	1.120	.000	.940	.000
Approved .087	.087	35.740	.418	.007	.952	.000
Applic:28457 To B#:1587 .000	.000	35.740	.000	.000	.000	.000
Applic:28457 To B#:1588 .087	.087	.000	.418	.007	.952	.000
<hr/>						
Balance .000	.000	.000	.000	.000	.000	.000

Adjustment Analysis

This Adjustment Review only covers the POC ERCs from banking certificate 1118 that were used to provide major-NSR offsets for application 26437. No other ERCs from this banking certificate were used for major-NSR offsets.

POC Baseline

A copy of the Engineering Evaluation Report for banking application 26059 is attached. POC ERC calculations are summarized in that evaluation report.

POC emissions reductions from fuel combustion were based on fuel usage records for the 3-year baseline period (Mar. 2011 – Feb. 2014) and an AP-42 emission factor of 0.0054 pounds per MM BTU. POC emission reductions from bread and bun production were based on dough production records during the same baseline period and a POC abatement efficiency of 97.7% for A-5, Catalytic Thermal Oxidizer abating S-4. The 97.7% emission reduction efficiency for S-4 exceeded the 90% emission reduction requirement by Section 8-42-303. S-6 was exempt from the emission reduction requirement of Section 8-42-303 by Section 8-42-112 for existing ovens emitting less than 250 pounds per day.

POC Rule Applicability***BAAQMD Reg. 8-42***

Date of rule at time of deposit: June 1, 1994

Date of rule in SIP at time of use: June 1, 1994

Difference between the 2 versions of the rule: The banking application was evaluated based on the same version of Reg. 8-42 than is approved into the SIP. Therefore, no additional adjustments are necessary for changes to Reg. 8-42.

NSPS***NESHAP*****POC RACT Reduction**

Based on the above rule applicability discussion, there is no adjustment necessary for POC ERCs from this banking application.

By: Greg Stone
Title: Supervising Air Quality Engineer
Date: 2/20/18

Federal Offset Equivalence ERC Adjustments for B# 1589

These ERCs are for reductions that occurred at:

Plant Name: *Bimbo Bakeries USA*

City: *South San Francisco*

PN: *2483*

Original Banking Certificate No(s): *1118*

Original Banking Application No(s): *17288*

Summary of ERC Adjustments (TPY)

Pollutant	Original ERCs	Adjustment Reduction	Adjusted ERCs
POC	23.134	0	23.134

Background

This ERC adjustment review is based on a review of the banking application file (application number 17288), including the Engineering Evaluation Report (attached). This banking application was for the installation of a new catalytic oxidizer (A-6) abating a previously unabated bread baking oven (S-1 Peterson 100 Foot Tunnel Oven).

POC Emission Reduction Credits (ERCs) were generated by abating POC emissions from S-1. ERC calculations were based on the difference between actual emissions during the 3-year baseline (Feb. 2005 – Jan. 2008) and the new permit limit of 6000 pounds per year. S-1 is subject to District Regulation 8-42, Large Commercial Bread Bakeries. S-1 is exempt from the emission control requirements of Section 8-42-303 by Section 8-42-112 for existing ovens emitting less than 250 pounds per day.

Banking Certificate 1118 was issued on May 1, 2008, and included 23.134 TPY of POC ERCs. 10.134 TPY of those POC ERCs were used (via Banking Certificate 1589) as part of the POC offsets for Waste Management application 26437 on September 21, 2017.

BAAQMD Data Bank Information

Banking Application

Application: 17288 Trade Secrets (Y/N/?): ?
Plant number: 2483
Site number: A2483
Plant name: Bimbo Bakeries USA
Plant emissions: PM: 0.32 POC: 4.111 NOx: 2.791 SO2: 0.011 (tpy)
Location: 264 So Spruce Avenue, South San Francisco, CA 94080
UTM coordinates: 551.13 Longitude 4166.5 Latitude
Project title: Banking: ERCs from new catalytic oxidizer install
Plant contact: Mario Abdon Nevarez, Plant Maintenance & Eng Manage

Mailing address: 264 So Spruce Avenue, South San Francisco, CA 940
 Telephone: (650) 875-3174
 Engineer: Pamela J Leong [742]
 Folder : Pamela J Leong
 Received: 01/23/08 . . Completeness review due by: 02/21/08
 Incomplete: 02/05/08 Cancellation due by: 04/05/08
 Re-activated: 04/16/08 . . Completeness review due by: 05/08/08
 Complete: 04/16/08 Evaluation due by: 05/16/08

Final disposition: Waived A/C 05/01/08 (archived record)
 Emission increase: none

Device No.: S-1 <c>
 Description: Peterson 100 Foot Tunnel Oven
 Codes: Mod/Banking
 Condition No.: 23901 <<c>>
 Condition No.: 7291 <<a>>
 Condition No.: 16974 <<a>>
 Condition No.: 17855 <<a>>
 Condition No.: 16974 <<a>>
 Final App Status: P/O issued, 05/01/08 <<archived>>

Banking Certificate(s)

Banking Certificate: 1589

Application no: 28457
 Final Disposition: Certificate Issued 01/24/17
 Reduction Location: Bimbo Bakeries USA [South San Francisco]
 Certificate owner: [227] Waste Management of Alameda County, Inc.
 Contact: Barry Skolnick, tel: (925) 890-2746
 Mailing address: 293 Mountaire Pkwy, Clayton, CA 94517

Transfer from #: 1583
 Original cert.#: 1118

tons per year	PM25	POC	NOX	SO2	CO	NPOC
PM10						
Requested .000	.000	.000	.000	.000	.000	.000
Approved .000	.000	10.134	.000	.000	.000	.000
Applic:26437 Withdrawal .000	.000	10.134	.000	.000	.000	.000
Balance .000	.000	.000	.000	.000	.000	.000

Banking Certificate: 1583

Application no: 28414
Final Disposition: Certificate Issued 12/13/16
Reduction Location: Bimbo Bakeries USA [South San Francisco]
Certificate owner: [152] Bimbo Bakeries USA
Contact: Kacey Fung, tel: (847) 292-7634
Mailing address: 8550 W Bryn Mawr Ave, Suite 1000, Chicago, IL 606
Email: kfung@bbumail.com

Transfer from #: 1118
Original cert.#: 1118

tons per year PM10	PM25	POC	NOX	S02	CO	NPOC
Requested .000	.000	.000	.000	.000	.000	.000
Approved .000	.000	10.134	.000	.000	.000	.000
Applic:28457 To B#:1589 .000	.000	10.134	.000	.000	.000	.000
Balance .000	.000	.000	.000	.000	.000	.000

Banking Certificate: 1118

Application no: 17288
Final Disposition: Certificate Issued 05/01/08
Reduction Location: Bimbo Bakeries USA [South San Francisco]
Certificate owner: [152] Bimbo Bakeries USA
Contact: Kacey Fung, tel: (847) 292-7634
Mailing address: 8550 W Bryn Mawr Ave, Suite 1000, Chicago, IL 606
Email: kfung@bbumail.com

tons per year PM10	PM25	POC	NOX	S02	CO	NPOC
Requested .000	.000	31.200	.000	.000	.000	.000
Approved .000	.000	23.134	.000	.000	.000	.000

Applic:28414

To B#:1582 .000	.000	13.000	.000	.000	.000	.000
Applic:28414 To B#:1583 .000	.000	10.134	.000	.000	.000	.000
<hr/>						
Balance .000	.000	.000	.000	.000	.000	.000

Adjustment Analysis

This Adjustment Review only covers the POC ERCs from banking certificate 1118 that were used to provide major-NSR offsets for application 26437. No other ERCs from this banking certificate were used for major-NSR offsets.

POC Baseline

POC Rule Applicability

BAAQMD Reg. 8-42

Date of rule at time of deposit: June 1, 1994

Date of rule in SIP at time of use: June 1, 1994

Difference between the 2 versions of the rule: The banking application was evaluated based on the same version of Reg. 8-42 than is approved into the SIP. Therefore, no additional adjustments are necessary for changes to Reg. 8-42.

NSPS

NESHAP

POC RACT Reduction

Based on the above rule applicability discussion, there is no adjustment necessary for POC ERCs from this banking application.

By: Greg Stone
Title: Supervising Air Quality Engineer
Date: 2/20/18

Federal Offset Equivalence ERC Adjustments for B# 1597

These ERCs are for reductions that occurred at:

Plant Name: Bemis Flexible Packaging

City: Newark

PN: 20177

Original Banking Certificate No(s): 1374

Original Banking Application No(s): 24574

Summary of ERC Adjustments (TPY)

Pollutant	Original ERCs	Adjustment Reduction	Adjusted ERCs
POC	74.274	0	74.274
NOx	3.094		ND
PM2.5	0.192		ND

ND = not determined

Background

This ERC adjustment review is based on a review of the banking application file (application number 24574), including the Engineering Evaluation Report (attached). This banking application was for the shutdown of a flexible packaging manufacturing facility, including the following sources:

- S-17 #15 Extruder Laminator
- S-18 #15 Laminator Oven
- S-24 Line IS Primer Station #2
- S-2S Line IS- 2nd Cooter Dryer
- S-26 Between Color and Tunnel Dryers
- S-27 Flexographic Printing Press P6
- S-28 Flexographic Printing Press- Dryer
- S-29 Flexographic Press P8
- S-30 Flexographic Printing Press P7 Dryer
- A-2 Catalytic Oxidizer
- A-3 Catalytic Oxidizer
- A-4 Thermal Regenerative

Emission reduction credits (ERCs) were generated from fuel combustions sources (NOx, CO, SO2, POC and PM) and coating/printing sources (POC). ERC calculations were based on a 3-year baseline (Jan. 2010 – Dec. 2012) for all sources except S-26, 27 and 29. POC ERCs from those sources were based on the fully offset emission limits in permit condition ID# 23913. The coating and printing sources were subject to District Regulation 8, Rule 20, for Graphic Arts Coating Operations.

Banking Certificate 1374 was issued on June 19, 2013. 74.0 tons per year POC ERCs from this application were used (via Banking Certificate 1597) as part of the POC offsets for Waste Management application 26437 on September 21, 2017.

BAAQMD Data Bank Information

Banking Application

Date: 15Feb18
Application: 24574 Trade Secrets (Y/N/?): ?
Plant number: 20177
Site number: A0273
Plant name: Bemis Flexible Packaging-Milprint Div
Closed: 04/18/12
Plant emissions: PM: 8.308 POC: 21.822 NOx: 0.932 SO2: 0.003 (tpy)
Location: 6590 Central Ave, Newark, CA 94560
UTM coordinates: 586.22 Longitude 4153.8 Latitude
Project title: Banking: plant closure
Plant contact: Todd Ravazza, EHS Manager
Mailing address: 6590 Central Ave, Newark, CA 94560
Telephone: (510) 745-1357
Engineer: Kevin Oei [1343]
Folder : Scanned
Received: 06/21/12 . . Completeness review due by: 07/20/12
Incomplete: 07/19/12 Cancellation due by: 02/14/13
Re-activated: 01/24/13 . . Completeness review due by: 02/15/13
Complete: 01/24/13 Evaluation due by: 03/25/13
Comment: 03/06/13 Final decision due by: 05/14/13

Final disposition: Grant/Issue 06/19/13 (archived record)
Emission increase: none

Device No.: S-17 <a: 06/14/13>
Description: #15 EXTRUDER LAMINATOR
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>
Current Status: Archived, 06/14/13

Device No.: S-18 <a: 06/14/13>
Description: #15 LAMINATOR OVEN
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>
Current Status: Archived, 06/14/13

Device No.: S-24 <a: 06/14/13>
Description: Line 15 Primer Station #2
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>
Current Status: Archived, 06/14/13

Device No.: S-25 <a: 06/14/13>
Description: Line 15 - 2nd Coater Dryer
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>
Current Status: Archived, 06/14/13

Device No.: S-26 <a: 06/14/13>
Description: Between Color and Tunnel Dryers
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>
Current Status: Archived, 06/14/13

Device No.: S-27 <a: 06/14/13>
Description: Flexographic Printing Press P6
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>
Current Status: Archived, 06/14/13

Device No.: S-28 <a: 06/14/13>
Description: Flexographic Printing Press - Dryer
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>
Current Status: Archived, 06/14/13

Device No.: S-29 <a: 02/29/12>
Description: Flexographic Press P8
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>
Current Status: Archived, 02/29/12

Device No.: S-30 <a: 02/29/12>
Description: Flexographic Printing Press P7 Dryer
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>
Current Status: Archived, 02/29/12

Device No.: A-4 <a>
Description: Thermal Regenerative
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>

Device No.: A-3 <a>
Description: Catalytic Oxidizer
Codes: Dis/Banking
Condition No.: 23913 <<a>>
Final App Status: Canceled, 06/19/13 <<archived>>

Device No.: A-2 <a>

Description: Catalytic Oxidizer
 Codes: Dis/Banking
 Condition No.: 23913 <<a>>
 Final App Status: Canceled, 06/19/13 <<archived>>

Banking Certificate(s)

Banking Certificate: 1597

Application no: 28611
 Final Disposition: Certificate Issued 04/27/17
 Reduction Location: Bemis Flexible Packaging-Milprint Div [Newark]
 Certificate owner: [227] Waste Management of Alameda County, Inc.
 Contact: Barry Skolnick, tel: (925) 890-2746
 Mailing address: 293 Mountaire Pkwy, Clayton, CA 94517

Transfer from #: 1374

Original cert.#: 1374

tons per year PM10	PM25	POC	NOX	SO2	CO	NPOC
Requested .000	.000	.000	.000	.000	.000	.000
Approved .000	.000	74.000	.000	.000	.000	.000
Applic:26437 Withdrawal .000	.000	74.000	.000	.000	.000	.000
Balance .000	.000	.000	.000	.000	.000	.000

Banking Certificate: 1374

Application no: 24574
 Final Disposition: Certificate Issued 06/19/13
 Reduction Location: Bemis Flexible Packaging-Milprint Div [Newark]
 Certificate owner: [197] Bemis Company
 Contact: Howard Hofmeister, tel: (920) 527-7417
 Mailing address: 2200 Badger Avenue, Oshkosh, WI 54904
 Email: hghofmeister@bemis.com

tons per year PM10	PM25	POC	NOX	SO2	CO	NPOC
Requested .250	.000	79.810	4.030	.020	2.770	.000

Approved .192	.192	74.274	3.094	.015	2.124	.000
Applic:28611 To B#:1597 .000	.000	74.000	.000	.000	.000	.000
Applic:28611 To B#:1598 .192	.192	.274	3.094	.015	2.124	.000
<hr/>						
Balance .000	.000	.000	.000	.000	.000	.000

Adjustment Analysis

This Adjustment Review only covers the POC ERCs from banking certificate 1374 that were used to provide major-NSR offsets for application 26437. No other ERCs from this banking certificate were used for major-NSR offsets.

POC Baseline

POC Rule Applicability

BAAQMD Reg. 8-20

Date of rule at time of deposit: November 19, 2008

Date of rule in SIP at time of use: March 3, 1999

Difference between the 2 versions of the rule: The banking application was evaluated and adjusted based on a more recent version of Reg. 8-20 than is approved into the SIP. Therefore, no additional adjustments are necessary for changes to Reg. 8-20.

NSPS Subpart

NESHAP Subpart KK

NESHAP Subpart KK applies to the printing and publishing industry, include wide-web flexographic printing. Wide-web is defined as a web width greater than 18 inches. The banking application does not indicate the web width of sources S-27 and S-29. However, Subpart KK does not apply to Bemis because the facility was not a major source of Hazardous Air Pollutants (HAPs). Beamis had a Synthetic Minor Operating Permit which limited annual emissions of HAPs to less than the major source thresholds – emissions of any single HAP less than 10 tons per year, and the combination of all HAPs less than 25 tons per year.

POC RACT Reduction

Based on the above rule applicability discussion, there is no adjustment necessary for POC ERCs from this banking application.

By: Greg Stone

Title: Supervising Air Quality Engineer

Date: 2/15/18

Federal Offset Equivalence ERC Adjustments for B# 1602

These ERCs are for reductions that occurred at:

Plant Name: New Wincup Holdings, Inc.

City: Corte Madera

PN: 18198

Original Banking Certificate No(s): 1327

Original Banking Application No(s): 24085

Summary of ERC Adjustments (TPY)

Pollutant	Original ERCs	Adjustment Reduction	Adjusted ERCs
POC	31.741	0	31.741
NOx	1.090		ND
PM2.5	0.571		ND

ND = not determined

Background

This ERC adjustment review is based on a review of the banking application file (application number 24085), including the Engineering Evaluation Report (attached). This banking application was for the shutdown of a facility that manufactured expanded polystyrene foam cups and containers. Shut down sources include the following:

Two natural gas fired boilers:

S-1 3-PASS, Steam Boiler, 600 HP

S-2 4-PASS, Steam Boiler, 500 HP

29 foam cup molding production lines:

S-4 Foam Cup Molding Lines 1-10

S-5 Foam Cup Molding Lines 11-16

S-6 Foam Cup Molding Lines 17-25

S-7 Foam Cup Molding Lines 27-30

Five pre-expander lines:

S-11 Pre-Expander

S-12 Pre-Expander

S-13 Pre-Expander

S-14 Pre-Expander

S-15 Pre-Expander

A cold solvent degreaser and a cold solvent cleaning operation:

S-17 Cold Cleaner

S-41 Solvent Cleaning Operation

Emission reduction credits (ERCs) were generated from fuel combustions sources (NOx, CO, SO2, POC and PM), expanded foam sources (POC), and solvent cleaning sources (POC). ERC calculations were based on a 3-year baseline (Feb. 2009 – Jan. 2012) for all sources. Combustion sources (S-1 and S-2) were subject to District Reg. 9-7. The expanded foam sources (S-4 through S-7, S-11 through S-15) were subject to District Reg. 8-52, for Polystyrene, Polypropylene and Polyethylene Product Manufacturing Operations. Solvent cleaning sources (S-17 and S-41) were subject to District Reg. 8-16.

Banking Certificate 1327 was issued on January 29, 2013, and included 31.741 TPY of POC ERCs. 23.865 TPY of the POC ERCs were used (via Banking Certificate 1602) as part of the POC offsets for Waste Management application 26437 on September 21, 2017.

BAAQMD Data Bank Information

Banking Application

Application: 24085 Trade Secrets (Y/N/?): ?
Plant number: 18198
Site number: A1317
Plant name: New WinCup Holdings, Inc
Closed: 05/20/11
Plant emissions: PM: 0.303 POC: 32.184 NOx: 14.174 SO2: 0.057 (tpy)
Location: 195 Tamal Vista Boulevard, Corte Madera, CA 94925
UTM coordinates: 542.54 Longitude 4198.6 Latitude
Project title: Banking: plant closure
Plant contact: Timothy Crawford,
Mailing address: 4640 Lewis Road, Stone Mountain, GA 30083
Telephone: (770) 492-5522
Engineer: Kevin Oei [1343]
Folder : Scanned
Received: 01/03/12 . . Completeness review due by: 02/01/12
Incomplete: 01/31/12 Cancellation due by: 03/31/12
Re-activated: 01/31/12 . . Completeness review due by: 02/22/12
Complete: 01/31/12 Evaluation due by: 12/16/12

Final disposition: Grant/Issue 01/10/13 (archived record)
Emission increase: none

Banking Certificate(s)

Banking Certificate: 1602

Application no: 28641
Final Disposition: Certificate Issued 05/08/17
Reduction Location: New WinCup Holdings, Inc [Corte Madera]
Certificate owner: [227] Waste Management of Alameda County, Inc.
Contact: Barry Skolnick, tel: (925) 890-2746
Mailing address: 293 Mountaire Pkwy, Clayton, CA 94517

Transfer from #: 1600
Original cert.#: 1327

tons per year PM10	PM25	POC	NOX	SO2	CO	NPOC
Requested .000	.000	.000	.000	.000	.000	.000
Approved .000	.000	31.741	.000	.000	.000	.000
Applic:26437 Withdrawal .000	.000	23.865	.000	.000	.000	.000
Applic:26437 To B#:1618 .000	.000	7.876	.000	.000	.000	.000
Balance .000	.000	.000	.000	.000	.000	.000

Banking Certificate: 1600

Application no: 28641
 Final Disposition: Certificate Issued 05/08/17
 Reduction Location: New WinCup Holdings, Inc [Corte Madera]
 Certificate owner: Element Markets LLC [plant 18766]
 Transfer from #: 1327
 Original cert.#: 1327

tons per year PM10	PM25	POC	NOX	SO2	CO	NPOC
Requested .000	.000	.000	.000	.000	.000	.000
Approved .000	.000	31.741	1.090	.000	.000	.000
Applic:28641 To B#:1602 .000	.000	31.741	.000	.000	.000	.000
Applic:28641 To B#:1603 .000	.000	.000	1.090	.000	.000	.000
Balance .000	.000	.000	.000	.000	.000	.000

Banking Certificate: 1327

Application no: 24085
Final Disposition: Certificate Issued 01/29/13
Reduction Location: New WinCup Holdings, Inc [Corte Madera]
Certificate owner: [192] New WinCup Holdings, Inc.
Contact: James H. Griffiths, tel: (404) 423-5994
Mailing address: 4640 Lewis Road, Stone Mountain, GA 30083
Email: jimgriffiths@wincup.com

tons per year PM10	PM25	POC	NOX	S02	CO	NPOC
Requested .300	.000	35.620	13.690	.050	3.420	.000
Approved .571	.571	31.741	1.090	.045	1.190	.000
Applic:28641 To B#:1600 .000	.000	31.741	1.090	.000	.000	.000
Applic:28641 To B#:1601 .571	.571	.000	.000	.045	1.190	.000
Balance .000	.000	.000	.000	.000	.000	.000

Adjustment Analysis

This Adjustment Review only covers the POC ERCs from banking certificate 1327 that were used to provide major-NSR offsets for application 26437. No other ERCs from this banking certificate were used for major-NSR offsets.

POC Baseline

POC Rule Applicability

BAAQMD Reg. 8-16

Date of rule at time of deposit: October 16, 2002

Date of rule in SIP at time of use: October 16, 2002

Difference between the 2 versions of the rule: The banking application was evaluated based on the same version of Reg. 8-16 than is approved into the SIP. Therefore, no additional adjustments are necessary for changes to Reg. 8-16.

BAAQMD Reg. 8-52

Date of rule at time of deposit: July 7, 1999

Date of rule in SIP at time of use: July 7, 1999

Difference between the 2 versions of the rule: The banking application was evaluated based on the same version of Reg. 8-52 than is approved into the SIP. Therefore, no additional adjustments are necessary for changes to Reg. 8-52.

BAAQMD Reg. 9-7

Date of rule at time of deposit: May 4, 2011

Date of rule in SIP at time of use: September 15, 1993

Difference between the 2 versions of the rule: The banking application was evaluated based on a more recent version of Reg. 9-7 than is approved into the SIP. Neither version limits POC emissions from boilers. Therefore, no additional adjustments are necessary for changes to Reg. 9-7.

NSPS

NESHAP

There is no NESHAP rule that applies to the manufacturing of expanded polystyrene foam products.

POC RACT Reduction

Based on the above rule applicability discussion, there is no adjustment necessary for POC ERCs from this banking application.

By: Greg Stone

Title: Supervising Air Quality Engineer

Date: 2/20/18

Appendix D

Engineering Evaluation Reports for Banking Applications

Application 26059 – Earthgrains Baking Companies, Inc., Certificate 1423

Application 17288 – Bimbo Bakery USA, Certificate 1118

Application 24574 – Bemix Flexible Packaging, Certificate 1374

Application 24085 – New Wincup Holdings, Inc., Certificate 1327

ENGINEERING EVALUATION
Earthgrains Baking Companies, Inc.
Plant No. 532
Banking Application No. 26059

BACKGROUND

Earthgrains Baking Companies, Inc. (Earthgrains) or Plant No. 532, located at 955 Kennedy Street in Oakland, CA has applied for emission reduction credits (ERCs) corresponding to the permanent shutdown of the following equipment:

- S-4 Bread Oven, 6.694 MMBtu/hr abated by A-5 Catalytic Thermal Oxidizer**
- S-6 Bun Oven, 4.2 MMBtu/hr**

Earthgrains decided to close the Oakland bakery after recent assessment of the bakery that revealed that it was incapable of competing in today's marketplace. The operations at the plant ceased on Feb 27, 2014. Bimbo bakeries USA (BBU) is handling the decommissioning of the Oakland bakery. As part of the decommissioning, the ovens and the afterburner were locked out and their fuel supply lines were capped.

A portion of the bread and buns production has shifted to existing permitted equipment at BBU's South San Francisco facility or Plant No. 2483. The project was evaluated under Application No. 26099.

The criteria pollutants for which Earthgrains has requested ERCs are nitrogen oxides (NO_x), carbon monoxide (CO), precursor organic compounds (POC), sulfur dioxide (SO₂), and particulate matter (PM₁₀). All of these pollutants are briefly discussed on the District's web site at www.baaqmd.gov.

This evaluation report will estimate the ERCs associated with the permanent shutdown of S-4 and S-6 at Plant No. 532 and will discuss the compliance of the project with applicable rules and regulations.

EMISSION REDUCTION CREDITS SUMMARY

The District's ERC banking rule is Regulation 2, Rule 4. The emission calculation procedure in Section 2-4-601 refers to the emission calculation procedures in the New Source Review Rule, which is Regulation 2, Rule 2. For ERCs, the calculation procedure is described in Section 2-2-605.

This banking application was deemed complete on 2/26/2014. Therefore, the three-year baseline period for this application is 2/27/2011 through 2/26/2014.

During the time S-4 and S-6 were in active operation, facility-wide natural gas fuel usage was monitored and recorded on a monthly basis. For purposes of ERC calculations, Earthgrains has provided:

- The facility-wide natural gas fuel usage data on a monthly basis during the three-year baseline period;
- A proposed method to estimate the natural gas fuel usage at each individual natural gas-fired combustion unit that Earthgrains had; and
- The yeast percentage, fermentation time, and dough production data on a monthly basis during the three-year baseline period.

Appendix A tabulates the monthly natural gas fuel usage data and compares the data with the natural gas fuel usage amounts reported during annual data updates. Appendix A also explains the method to estimate the natural gas fuel usage at each individual natural gas-fired combustion unit that Earthgrains had. Appendix B tabulates the monthly POC emissions from the dough rising, which are calculated using the emission factors from District Regulation 8-42.

The emission factors used to calculate the ERCs from the natural gas fuel combustion for this banking application are as follows:

NO_x, CO, POC, PM₁₀, and SO₂:

NO_x, CO, POC, PM₁₀, and SO₂ emission factors are from AP-42, Fifth Edition, Tables 1.4-1 and 1.4-2, and are summarized in Table I.

Table I. NO_x, CO, POC, PM₁₀, and SO₂ emission factors from AP-42, Fifth Edition, Tables 1.4-1 and 1.4-2

Pollutant	AP-42 Emission Factor (lb/MM scf)	AP-42 Emission Factor (lb/MMBtu) ¹
NO _x (uncontrolled)	100	0.098
CO	84	0.082
POC	5.5	0.0054
PM ₁₀	7.6 ²	0.0075
SO ₂	0.6	0.0006

¹Note: To convert from lb/MM cu ft to lb/MMBtu, divide by 1,020, per AP-42 Table 1.4-2.

²Note: PM (Condensable) = 5.7 lb/MM cu ft, and PM (Filterable) = 1.9 lb/MM cu ft.

PM_{2.5}:

Per updated CEIDARS List with PM_{2.5} Fractions, PM_{2.5} fraction of PM₁₀ for gaseous fuel-fired external combustion equipment is 1.000. Therefore, PM_{2.5} emission factor is 7.6 lb/MM scf or 0.0075 lb/MMBtu.

The emission factors used to calculate the ERCs from the dough rising for this banking application are as follows:

POC:

POC emission factors are from District Regulation 8-42. The emission factors provided in Table I of this rule can be turned into an equation:

$$\text{Pounds VOC/ton bakery product} = 0.4446 Y_t + 0.4043$$

where $Y_t = (\text{initial yeast \%}) * (\text{total fermentation time}) + (\text{remaining yeast \%}) * (\text{remaining fermentation time})$

For the emissions from S-4, a control efficiency of 97.7% is used. This number is the average control efficiency based on three source tests (dated 12/8/2011, 12/6/2012, and 12/3/2013) conducted at A-5.

To calculate mass emissions, the POC emission factor is multiplied by the dough production amount.

NO_x, CO, PM₁₀, PM_{2.5}, and SO₂:

There were no NO_x, CO, PM₁₀, PM_{2.5}, and SO₂ emissions from the dough rising

Regulation 2-2-605.5 requires adjustments of the baseline emission rate to comply with the most stringent of RACT, BARCT, and District rules and regulations in effect or contained in the most recently adopted Clean Air Plan (CAP). These adjustments are as follows:

Adjustment #1: Permit Limits

S-4 was subject to Permit Condition No. 19934, which has the following limits:

- 150 lb/day or 25 TPY POC emissions from S-4, abated by A-5; and
- 95.2% minimum destruction efficiency by A-5.

Abated by A-5, S-4 never exceeded the 150 lb/day or 25 TPY POC emissions limit during the three-year baseline period. The control efficiency used in this banking application is 97.7%, greater than the 95.2% limit.

There was never any permit condition for S-6.

Therefore, no emission rates from S-4 and S-6 need to be adjusted downward to comply with applicable permit limits.

Adjustment #2: Current District's Rules and Regulations

S-4 and S-6 were not subject to Regulation 9-7 because they were ovens used for baking, and this is in accordance with Section 9-7-110.6. Therefore, the NOx and CO emission rates from the ovens will not need to be adjusted downward to comply with the limits set forth in Regulation 9-7.

S-4 and S-6 were, however, subject to Regulation 8-42. S-4 met the emission control limit of 90% in Regulation 8-42-303 since the POC emissions from the source were abated by A-5 with a control efficiency of 97.7%. Pursuant to Regulation 8-42-112, the emissions from S-6 were exempt from Regulation 8-42-303 because the source commenced operation in 1984 (prior to January 1, 1988) and emitted less than 250 lb/day, averaged over a period of one year. Therefore, the POC emission rates from S-6 will not need to be adjusted downward to comply with the limits set forth in Regulation 8-42.

Adjustment #3: Current Clean Air Plan

The most current Clean Air Plan (CAP) is the 2010 CAP. There are 18 stationary source control measures contained in the 2010 CAP, adopted on September 15, 2010. Operations of sources such as S-4 and S-6 at Earthgrains are contained in the 2010 CAP under Stationary Source Measure (SSM) 13 for dryers, ovens, and kilns exempt from the requirements of Regulation 9-7.

SSM 13 recommends a rule similar to SCAQMD Rule 1147, which limits NOx emissions from ovens such as S-4 and S-6 at Earthgrains to 0.036 lb/MMBtu. Therefore, the NOx emission rates from S-4 and S-6 need to be adjusted downward to 0.036 lb/MMBtu to comply with the 2010 CAP. The emissions from natural gas fuel combustion are displayed in Appendix C.

Table 2 summarizes the ERCs calculated for this banking application.

Table 2. Summary of ERCs from the permanent shutdown of S-4 and S-6

Pollutant	ERC (TPY)		
	S-4	S-6	Total
NOx	0.279	0.139	0.418
CO	0.635	0.317	0.952
POC	2.203	34.537	36.740
PM ₁₀ ¹	0.058	0.029	0.087
PM _{2.5} ¹	0.058	0.029	0.087
SO ₂	0.005	0.002	0.007

¹Note: The PM₁₀ ERC total includes the PM_{2.5} listed here. PM_{2.5} ERCs may be used as offsets for either PM_{2.5} or PM₁₀, but not both.

Because a portion of the bread and buns production has shifted to existing permitted equipment at BBU's South San Francisco facility or Plant No. 2483, there has been an emission shift from the Oakland bakery to the South San Francisco facility. The project was evaluated under Application No. 26099. Under Application No. 26099, it was determined that the amount of emission shift from the Oakland bakery to the South San Francisco facility was 1 TPY of POC. (Under Application No. 26099, the POC emissions limit for S-9 at Plant No. 2483 was increased from 6,500 lb/yr [Part 2 of archived Permit Condition No. 17828] to 8,500 lb/yr [Part 2 of Permit Condition No. 23902].) This emission shift cannot be banked, in accordance with Regulation 2-4-303.2. ✓

SMALL FACILITY BANK AND BANKING ACCOUNT

Earthgrains never received any offsets from the Small Facility Banking Account (SFBA). Earthgrains is one of Bimbo Bakeries' brands, and this makes Bimbo Bakeries the company that owns Earthgrains. There is only one Bimbo Bakeries facility (Plant 2483) permitted with the District, and it is located in South San Francisco. Plant 2483 never received any offsets from the SFBA either. Therefore, no such emission offsets are required to be repaid to the SFBA as per Regulation 2-4-303.5.

STATEMENT OF COMPLIANCE

The ERCs are subject to and expected to comply with the standards of Regulation 2-4-302 for Bankable Reductions for Closures and Regulation 2-4-303 for Limitations on Deposits. Per Regulation 2-4-302.1, the portion of ERCs from the shutdown or closure of S-4 and S-6 that did not and will not shift to other sources within the District are bankable because the emission reductions are permanent. No condition will be imposed for the emission reduction not replaced by an emissions increase elsewhere within the District. Per Regulation 2-4-302.2, issuance of a Banking Certificate for emission reductions resulting from the closure of S-4 and S-6 cancels the permit to operate the source. Per Regulation 2-4-303.2, the portion of ERCs from the shutdown or closure of S-4 and S-6 that shifted to other sources within the District are not bankable. This portion was calculated under Application No. 26099 to be 1 TYPY of POC.

The ERC calculations were performed in accordance with the methodology outlined in Regulation 2-2-605. ERCs from the shutdown of S-4 and S-6 are calculated based on the following data during the three-year baseline period from 2/27/2011 through 2/26/2014: (1) actual natural gas fuel usage, (2) actual dough data, (3) NO_x, CO, POC, PM₁₀, and SO₂ emission factors from AP-42, Fifth Edition, Tables 1.4-1 and 1.4-2, (4) PM_{2.5} emission factor, per updated CEIDARS List with PM_{2.5} Fractions, and (5) POC emission factors from District Regulation 8-42. The bankable ERCs required an adjustment to comply with the NO_x limit recommended by the 2010 CAP under SSM 13. The bankable ERCs did not require further adjustments.

Based on the data provided by Earthgrains, the ERCs are real, quantifiable, enforceable, and permanent as required by the definition of ERC in Regulation 2-2-201.

The ERCs from the shutdown of S-4 and S-6 do not exceed 40 tons/yr of any criteria pollutant, and the application is therefore not subject to Publication, Public Comment and Inspection of Regulation 2-4-405.

The project is exempt from CEQA pursuant to Regulation 2-1-312.10. Earthgrains has completed and signed a BAAQMD Appendix H Environmental Information Form to ensure that the project has no potential for causing a significant adverse impact on the environment.

A toxics risk screening analysis is not required since there is no emission increase associated with the project.

PSD, Offsets, NSPS, and NESHAPS do not apply.

CONDITION

No conditions are required for this banking application, for the portion of ERCs from the shutdown or closure of S-4 and S-6 that did not and will not shift to other sources within the District. Conditions are commonly imposed on banking applications when an emission reduction is permanent at the source but it is unclear whether the reduction will be replaced by an emission increase elsewhere at the facility or within the District, or to ensure the permanency of the closure. Per Division policy, conditions are not necessarily needed in circumstances where the source, if operated in the future within the physical jurisdictional boundaries of the Bay Area Air Quality Management District, would be treated as a new source subject to New Source Review.

RECOMMENDATION

Issue ERCs to Earthgrains in the amounts shown below.

<u>Pollutant:</u>	<u>Unrestricted ERC Amount (TPY):</u>
NOx	0.418
CO	0.952
POC	35.740
PM ₁₀ (see *Note below)	0.087
PM _{2.5} (see *Note below)	0.087
SO ₂	0.007

**Note: The PM₁₀ ERC total includes the PM_{2.5} listed here. PM_{2.5} ERCs may be used as offsets for either PM_{2.5} or PM₁₀, but not both.*

Mail the Banking Certificate to the owner.

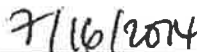
Kacey Fung
Regional Manager – Environmental/Sustainability
Bimbo Bakeries USA
8550 W. Bryn Mawr Avenue, Suite 1000
Chicago, IL 60631

By:



Kevin Oci, Air Quality Engineer

Date:



Date: 19Aug14
 Application: 26059 <<archived record>>
 Plant number: 532
 Site number: A0532
 Plant name: Earthgrains Baking Companies, Inc
 Closed: 02/27/14
 Plant emissions: PM: 0.029 POC: 24.868 NOx: 1.388 SO2: 0.005 (tpy)
 Location: 955 Kennedy Street, Oakland, CA 94606
 UTM coordinates: 567.16 Longitude 4181.3 Latitude
 Project title: Banking/ERC
 Plant contact: Jon Allen, Maintenance Manager
 Mailing address: 955 Kennedy Street, Oakland, CA 94606
 Telephone: (510) 436-5350 x204
 Engineer: Kevin Oei [1343]
 Folder: David M Brunelle
 Received: 02/26/14 . . . Completeness review due by: 03/19/14
 Complete: 02/26/14 Evaluation due by: 07/11/14

Final disposition: Grant/Issue 08/19/14
 Emission increase: none

Device No.: S-4 <a: 06/02/14>
 Description: BREAD OVEN, 6,694K BTU/HR
 Codes: Dis/Banking
 Condition No.: 5897 <<a>>
 Condition No.: 19934 <<a>>
 Final Disposition: Canceled, 08/19/14 <<archived>>

Device No.: S-6 <a: 06/02/14>
 Description: Bun Oven, 4,200 BTU/HR
 Codes: Dis/Banking
 Final Disposition: Canceled, 08/19/14 <<archived>>

Banking Certificate: 1423
 Application no: 26059
 Final Disposition: Certificate Issued 08/19/14
 Reduction Location: Earthgrains Baking Companies, Inc [Oakland]
 Certificate owner: Bimbo Bakeries USA
 Contact: Kacey Fung, tel: (630) 310-2304
 Mailing address: 8550 W Bryn Mawr Ave, Suite 1000, Chicago, IL 60631
 Email: kfung@bbumail.com

tons per year	PM25	POC	NOX	SO2	CO	NPOC	PM10
Requested	.000	15.250	1.120	.000	.940	.000	.090
Approved	.087	35.740	.418	.007	.952	.000	.087
Balance	.087	35.740	.418	.007	.952	.000	.087

Appendix A. Monthly Natural Gas Fuel Use Data

Table A1. Monthly facility-wide natural gas fuel usage data provided by Earthgrains

Period	Energy Usage (therm)	Energy Usage (MMBtu)
Feb-11	26,700	2,670
Mar-11	29,920	2,992
Apr-11	30,837	3,084
May-11	33,724	3,372
Jun-11	33,822	3,382
Jul-11	31,847	3,185
Aug-11	34,046	3,405
Sep-11	34,627	3,463
Oct-11	31,846	3,185
Nov-11	27,901	2,790
Dec-11	28,744	2,874
Jan-12	28,952	2,895
Feb-12	27,905	2,791
Mar-12	28,328	2,833
Apr-12	29,818	2,982
May-12	32,417	3,242
Jun-12	30,990	3,099
Jul-12	27,902	2,790
Aug-12	30,145	3,015
Sep-12	25,222	2,522
Oct-12	1	0
Nov-12	28,109	2,811
Dec-12	34,268	3,427
Jan-13	39,932	3,993
Feb-13	34,708	3,471
Mar-13	43,776	4,378
Apr-13	41,364	4,136
May-13	35,430	3,543
Jun-13	42,808	4,281
Jul-13	43,040	4,304
Aug-13	40,348	4,035
Sep-13	33,730	3,373
Oct-13	37,819	3,782
Nov-13	36,954	3,695
Dec-13	34,432	3,443
Jan-14	30,424	3,042
Feb-14	24,867	2,487
Mar-11 - Feb-12	374,171	37,417
Mar-12 - Feb-13	341,839	34,184
Mar-13 - Feb-14	444,992	44,499
Annual Average for Period from Mar-11 to Feb-14	387,001	38,700
Annual Average for Period from Mar-11 to Feb-14 for S-4¹	154,800	15,480
Annual Average for Period from Mar-11 to Feb-14 for S-6¹	77,400	7,740

¹Note: S-4 used 40% of the total facility-wide natural gas fuel usage and S-6 used 20%. Please see Table A2.

To estimate the natural gas fuel usage at each individual natural gas-fired combustion unit that Earthgrains had, the plant has provided the design capacities data and operation hours in calendar years 2011, 2012, and 2013 for each natural gas-fired combustion unit. From these data, it has been determined that S-4 used 40% of the total facility-wide natural gas fuel usage and S-6 used 20%. Please see Table A2.

Table A2. Natural gas-fired combustion units at Earthgrains

Unit	Design Capacity (MMBtu/hr)	Operation Hours (hr/yr)				Average Energy Usage	
		2011	2012	2013	Average	(MMBtu/yr)	% of Total Usage
Bread Oven (S-4)	6.694	5,050	4,380	6,460	5,297	35,456	40
Bun Oven (S-6)	4.2	3,682	3,505	5,305	4,164	17,489	20
Ballard-Johnson Boiler	3.36	1,095	1,095	1,095	1,095	3,679	4
Domestic Boiler	0.7	1,460	1,460	1,460	1,460	1,022	1
Cleaver-Brooks Boiler	4.18	5,050	4,380	6,460	5,297	22,140	25
Cat-Thermal Oxidizer (A-5)	1.6	5,050	4,380	6,460	5,297	8,475	10
Total						88,261	

As part of evaluation of a banking application, for purposes of verifying the data used to calculate ERCs, the District compares the data submitted with the application against those reported during annual data updates. During annual data updates, Earthgrains submitted natural gas usage data for calendar years 2011 and 2012 but not for calendar year 2013. The only annual update data that can be used for comparison in this banking application are therefore those for calendar year 2012. The data are 138,405 therms for S-4 and 69,492 therms for S-6. The data in Tables A1 and A2 show 129,623 therms for S-4 and 64,811 therms for S-6. Because the natural gas usage data used to calculate ERCs (in Tables A1 and A2) are more conservative than the data reported during annual data updates, there is no adjustment needed on the natural gas usage data used in this banking application.

Appendix B. Monthly POC Emissions from Dough Rising

Table B1. Monthly POC emissions from dough rising at S-4 and S-6

Period	POC Emissions (tons)		
	From Bread Production Line (S-4)	From Bun Production Line (S-6)	Total
Jan-11	0.199	2.120	2.319
Feb-11	0.176	2.281	2.457
Mar-11	0.190	2.223	2.413
Apr-11	0.179	3.581	3.760
May-11	0.193	4.346	4.539
Jun-11	0.189	4.962	5.151
Jul-11	0.185	3.564	3.749
Aug-11	0.195	3.632	3.827
Sep-11	0.197	2.359	2.556
Oct-11	0.190	2.028	2.218
Nov-11	0.177	1.661	1.838
Dec-11	0.182	1.492	1.674
Jan-12	0.190	1.931	2.121
Feb-12	0.183	1.799	1.982
Mar-12	0.181	1.923	2.104
Apr-12	0.177	2.661	2.838
May-12	0.160	3.528	3.688
Jun-12	0.142	3.838	3.980
Jul-12	0.144	2.845	2.989
Aug-12	0.159	2.981	3.140
Sep-12	0.142	2.363	2.505
Oct-12	0.155	2.154	2.309
Nov-12	0.163	2.150	2.313
Dec-12	0.220	2.342	2.562
Jan-13	0.242	3.420	3.662
Feb-13	0.227	2.880	3.107
Mar-13	0.249	4.244	4.493
Apr-13	0.237	4.316	4.553
May-13	0.207	4.572	4.779
Jun-13	0.203	5.269	5.472
Jul-13	0.206	4.692	4.898
Aug-13	0.196	3.935	4.131
Sep-13	0.199	2.942	3.141
Oct-13	0.154	1.664	1.818
Nov-13	0.140	1.841	1.980
Dec-13	0.141	1.047	1.188
Jan-14	0.120	1.229	1.350
Feb-14	0.069	1.134	1.203
Mar-11 - Feb-12	2.250	33.578	35.828
Mar-12 - Feb-13	2.112	33.085	35.197
Mar-13 - Feb-14	2.121	36.885	39.006
Annual Average for Period from Mar-11 to Feb-14	2.161	34.516	36.677

Table B1 summarizes the monthly POC emissions at S-4 and S-6 which were provided by Earthgrains in a data CD. The CD is included in the application folder.

As part of evaluation of a banking application, for purposes of verifying the data used to calculate ERCs, the District compares the data submitted with the application against those reported during annual data updates. During annual data updates, Earthgrains submitted dough data for calendar years 2011 and 2012 but not for calendar year 2013. The annual update data that can be used for comparison in this banking application are therefore those for calendar years 2011 and 2012. For 2011, the data are 27,702 tons for S-4 and 8,298 tons for S-6; for 2012, the data are 24,242 tons for S-4 and 8,098 tons for S-6. The dough data that are used to calculate the emissions in Table B1 and that are provided in the data CD by Earthgrains are consistent with these annual update data. Therefore, there is no adjustment needed on the dough data used in this banking application.

Appendix C. Emissions from Natural Gas Fuel Combustion

Table D1. Emissions from natural gas fuel combustion at S-4 and S-6, RACT adjusted

Source	Average Energy Usage (MMBtu/yr)	Pollutant	Emission Factor, RACT Adjusted (lb/MMBtu)	ERC (TPY)
S-4	15,480	NOx	0.036	0.279
		CO	0.082	0.635
		POC	0.0054	0.042
		PM ₁₀ ¹	0.0075	0.058
		PM _{2.5} ¹	0.0075	0.058
		SO ₂	0.0006	0.005
S-6	7,740	NOx	0.036	0.139
		CO	0.082	0.317
		POC	0.0054	0.021
		PM ₁₀ ¹	0.0075	0.029
		PM _{2.5} ¹	0.0075	0.029
		SO ₂	0.0006	0.002
Total		NOx		0.418
		CO		0.952
		POC		0.063
		PM ₁₀ ¹		0.087
		PM _{2.5} ¹		0.087
		SO ₂		0.007

¹Note: The PM₁₀ ERC total includes the PM_{2.5} listed here. PM_{2.5} ERCs may be used as offsets for either PM_{2.5} or PM₁₀ but not both.

ENGINEERING EVALUATION
Bimbo Bakeries USA
PLANT NO. 2483
BANKING APPLICATION NO. 17288

BACKGROUND

This application is to bank emission reduction credits (ERCs) from the reduced emissions associated with the installation of an abatement device at the following source:

S-1 Peterson 100 Foot Tunnel Oven abated by A-6 Catalytic Oxidizer

The Authority to Construct and/or Permit to Operate A-6 Catalytic Oxidizer, CSM Worldwide Model 60-A was issued in February 2008 (application 16975). A-6 Catalytic Oxidizer was installed to abate VOC emissions from S-1 Peterson 100 Foot Tunnel Oven and S-9 APV Baker Tray Oven. S-9 Oven was being abated by A-5 Catalytic Oxidizer. A-6 Catalytic Oxidizer will replace A-5 Catalytic Oxidizer and will be used to abate an additional oven, S-1. Bimbo has agreed to lower the POC emission limit at S-1 Oven from 68,467 lb/yr to 6,000 lb/yr (permit condition 16974).

EMISSIONS REDUCTION CREDIT SUMMARY

The District's ERC banking rule is Regulation 2, Rule 4. The emission calculation procedure in Section 2-4-601 refers to the emission calculation procedures in the New Source Review Rule, which is Regulation 2, Rule 2. For emission reduction credits, the calculation procedure is described in Section 2-2-605. The baseline period for this application is February 1, 2005 through January 31, 2008.

Bimbo Bakeries USA (Bimbo) has provided weekly POC emissions from S-1 for the baseline period. Bimbo has kept detailed records of the following items, as required by permit condition 16974: 1) daily quantity produced of each bread baked at S-1, 2) emission factor for each variety, 3) total weekly emissions, and 4) running total of emissions from S-1 over the last 52 weeks. Emission calculation procedures were verified using a sample of the detailed daily reports for the first week of February 2007 and for each week in January 2008. The weekly POC emissions from S-1 for the baseline period are in Appendix A-1 and the emissions calculations methodology is in Appendix A-2. The emissions are summarized on an annual basis in Table I.

Table I
POC Emissions from S-1 Oven

Year	POC Emissions
February 1, 2005 – January 31, 2006	50,369 lb
February 1, 2006 – January 31, 2007	52,443 lb
February 1, 2007 – January 31, 2008	53,991 lb
Total	156,803 lb
Average during 3 year baseline period	52,268 lb/yr

Regulation 2-2-605.6 defines the ERCs as the difference between the adjusted emissions and the emission cap or rate accepted by the applicant as a limiting condition. In permit condition 23901, part 2 (application 16975), Bimbo has been conditionally limited not to exceed 6,000 pounds of POC emissions in any consecutive 365 day period. The full text of permit condition 23901 is in Appendix B.

$$\text{ERCs} = 52,268 \text{ lb/yr} - 6,000 \text{ lb/yr} = 46,268 \text{ lb/yr} = 23.134 \text{ tpy}$$

Adjustments for RACT, BARCT, and District Rules and Regulations

Regulation 2-2-605.5 requires adjustment of the baseline emission rate to comply with the most stringent of RACT, BARCT, and District rules and regulations in effect or contained in the most recently adopted 2005 Ozone Strategy. There are fifteen stationary source control measures contained in the District's most current Ozone Strategy (Year 2005). They are 1) reduce VOC limits for some coating categories in Rule 8-45 Auto Refinishing; 2) reduce VOC limits for flexographic ink and cleanup solvent in Rule 8-20 Graphic Arts Operations; 3) require additional controls on spray booths that emit > 20 tons ROG/yr; 4) reduce allowable monomer content for some types of polyester resins in Rule 8-50 Polyester Resin Operations; 5) reduce VOC limits for some coating categories in Rule 8-32 Wood Coating Operations; 6) minimize flaring in Rule 12-12 Flares; 7) require additional controls and set more stringent standards for Rules 8-33 and 8-39 Gasoline Bulk Terminals and Plants; 8) control additional cargoes, set more stringent standards in Rules 8-44 and 8-46 Marine Loading Operations; 9) tighten existing requirements and/or control lower vapor pressure liquids in Rule 8-5 Organic Liquid Storage; 10) improve enforceability of Rule 8-28 Pressure Relief Devices; 11) control emissions from Rule 8-8 Wastewater Systems; 12) extend existing limits to more boilers or set a more stringent standard for Rule 9-7 Industrial, Institutional and Commercial Boilers; 13) require more boilers and large water heaters to meet NOx limits in Rules 9-6 and 9-7 Large Water Heaters and Small Boilers; 14) implement BARCT NOx limits on existing turbines in Rule 9-9 Stationary Gas Turbines; and 15) educate government, industry, and the public in energy efficient choices.

Bimbo is subject to Regulation 9-42: Organic Compounds, Large Commercial Bread Bakeries. Regulation 8-42 is not contained in the 2005 Ozone Strategy and no RACT adjustment to the baseline emission rate of VOC is required.

For S-1 Oven, Bimbo was previously subject to permit condition 16974 (see Appendix C). POC emissions from S-1 were limited to 68,467 pounds in any consecutive 365-day period. Bimbo did not exceed 68,467 lb POC during any 365-day period during the baseline period from February 1, 2005 to January 31, 2008.

S-1 Oven is a grandfathered source that was in operation prior to January 1, 1988. The owner/operator is exempt from abating S-1 Oven per Regulation 8-42-112 since emissions of ethanol are less than 250 pounds per day, averaged over a period of year. For the baseline period, Bimbo has operated S-1 Oven 5 days a week. Emissions of ethanol per operating day, averaged over a period of one year are in Table II below. To be conservative, all POCs are assumed to be ethanol.

Table II
 POC Emissions from S-1 Oven

Year	Annual POC Emissions	Daily POC Emissions
February 1, 2005 – January 31, 2006	50,369 lb	193.73 lb/day
February 1, 2006 – January 31, 2007	52,443 lb	201.70 lb/day
February 1, 2007 – January 31, 2008	53,991 lb	207.66 lb/day

8-42-112 Exemption, Existing Ovens: The requirements of Section 8-42-303 shall not apply to ovens, which commenced operation prior to January 1, 1988 and which are demonstrated to the satisfaction of the APCO to emit less than 113.7 kg (250 pounds) of ethanol per operating day, averaged over a period of one year.

8-42-303 Emission Control Requirements, Existing Ovens: Effective January 1, 1992, all existing ovens which commenced operation prior to January 1, 1989, shall be required to vent emissions to a control system meeting the following standards:

303.1 Emission collection system shall capture all emissions of precursor organic compounds from all oven stacks.

- 303.2 Collected emissions shall be vented to an approved emission control device which has a destruction efficiency of at least 90% on a mass basis.

Bimbo meets the requirements of Regulation 8-42 and ~~no~~ adjustment of the ERC calculation is necessary.

SMALL FACILITY BANK AND BANKING ACCOUNT

Bimbo has not been the recipient of POC offsets from the Small Facility Banking Account (SFBA). Therefore, no such emission offsets are required to be repaid to the SFBA as per Regulation 2-4-303.5. Appendix D contains a printout from the District's database that shows Bimbo's cumulative POC increases and any contemporaneous reductions and/or offsets provided. The data displays the Banking Certificate Numbers (if any) that were used to offset any cumulative increases. Banking Certificate Number 157 denotes the District's Small Facility Banking Account.

STATEMENT OF COMPLIANCE

The ERC calculations were performed in accordance with the procedures outlined in Regulation 2-2-605. ERCs for S-1 Peterson 100 Foot Tunnel Oven are calculated based on the types of bread baked and their associated emissions over the 3-year baseline period from February 1, 2005 through January 31, 2008. The bankable ERCs did not require adjustments due to RACT, BARCT, District Rules and Regulations, or permit conditions. During the baseline period, Bimbo met the exemption in Regulation 8-42-112, but with the voluntary add-on abatement with A-6 Catalytic Oxidizer, Bimbo will meet the requirements of Regulation 8-42-303 Emission Control Requirements.

The ERCs meet the standards of Regulation 2-4-301.1 and 2-4-301.3 for Bankable Reductions due to the "installation of a level of control greater than required by regulation" and "effective operation and maintenance of abatement equipment if the applicant accepts a condition on the permit specifying a lower level of emissions than otherwise required by District regulations". Bimbo has installed A-6 Catalytic Oxidizer and accepted a permit condition limiting POC emissions to 6,000 lb/yr from 68,467 lb/yr. and meets the requirement for ERCs in Regulation 2-2-201.2. No additional permit conditions will need to be imposed.

Based on the data provided by Bimbo and the permit conditions placed on S-1 Oven, the ERCs are real, quantifiable, enforceable, and permanent as required by the definition of Emission Reduction Credit in Regulation 2-2-201. The A-6 Catalytic Oxidizer has been started up and has been source tested as required by permit condition 23901 part 9. The results of the source test have been verified by the District Source Test Group (see Appendix E). A-6 Catalytic Oxidizer has a POC destruction efficiency of over 99% and meets the requirement of permit condition 23901 part 6, which requires a minimum POC destruction efficiency of 95%. The incinerator temperature was 600 F at the inlet, which meets the minimum inlet temperature of 550 F required in permit condition 23901 part 7.

The ERCs for S-1 Oven do not exceed 40 tons/yr of POC and the application is therefore not subject to Publication, Public Comment and Inspection of Regulation 2-4-405.

The project is exempt from CEQA pursuant to Regulation 2-1-312.10. Bimbo has completed and signed an Appendix H Environmental Information Form to ensure that the project has no potential for causing a significant adverse impact on the environment.

A toxics risk screening analysis is not required since there is no emission increase associated with the project.

BACT, PSD, Offsets, NSPS, and NESHAPS do not apply.

CONDITIONS

The owner/operator is already subject to permit condition 23901 for S-1 Oven abated by A-6 Catalytic Oxidizer. See Appendix B.

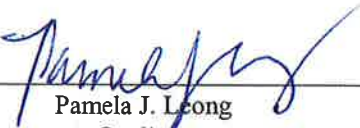
RECOMMENDATION

Issue emission reduction credits (ERCs) to Bimbo Bakeries USA in the amount shown below.

POC 23.134 tons per year

Mail the Banking Certificate to the owner.

Mark Armstrong
Engineer
Bimbo Bakeries USA
480 S. Vail Avenue
Montebello, CA 90640

By: 
Pamela J. Leong
Air Quality Engineer II
April 30, 2008

Appendix A-2

Emissions Calculations

Bimbo Bakeries calculates emissions using the procedures outlined in Regulation 8-42-602. At Bimbo, most bread doughs are made in two (or more) steps. In the first step, yeast is added to the dough and this is called "sponge dough". In the second step, the yeast that is added is in the form of some "yeast dough". Once the second yeast or "yeast dough" has been added, the dough is no longer "sponge dough" but "dough".

In Regulation 8-42-602, Table I yields the emission factor (lbs of VOC/ton of product) given Y_t . For a two step process, $Y_t = [(initial\ yeast\ \%) \times (total\ fermentation\ time) + (remaining\ yeast\ \%) \times (remaining\ fermentation\ time)]$

At Bimbo there is an additional fermentation step where ethanol is produced and emitted. After the final dough is made, the mixture is allowed to sit for one additional hour. Therefore an additional factor must be added to the equation for Y_t .

$Y_t = [(initial\ yeast\ \%) \times (total\ fermentation\ time) + (remaining\ yeast\ \%) \times (remaining\ fermentation\ time)] + [(total\ yeast\ \%) \times (additional\ fermentation\ time)]$

A sample calculation will be shown using the production and emissions data provided by Bimbo in Appendix A-1.

See data from the "First Week in February 2007; Detail"

Refer to the row that starts with the number #32 (or bread type #32).

- 1) Columns 1-5 (Day 1, Day 2,Day 5) = # of units of bread type #32 produced each day
= 2905, 0, 2984, 0, 676
- 2) Column "Actual Units Prod" = sum of units of bread type #32 for the week
= 2905 + 0 + 2984 + 0 + 676 = 6565
- 3) "Lbs per Unit" = weight of each loaf of bread type #32
= 2.28 lbs/loaf
- 4) "Total lbs. Produced" = "Actual Units Prod" X "Lbs per Unit"
= 6565 loaves X 2.28 lbs/loaf = 14968 lbs
- 5) "ETOH Lbs per week" = "Total lbs. Produced" X last column "ETOH lbs per ton"*
= 14968 lbs/2000 lbs/ton X 4.17 lbs ETOH/ton
= 31.22 lbs/week

**Note that the rest of the columns are used to calculate Y_t in order to use Regulation 8-42-602 to determine "ETOH lbs per ton", the emission factor for lbs of VOC/ton of bakery product.*

- 6) "Ferm T. sponge (# hrs)" = Fermentation time for step 1 (sponge dough) = 4 hours
- 7) "Yeast sponge (# lbs)" = Pounds of yeast in step 1 sponge dough expressed per 100 lb of dough
= 1.29 lbs
- 8) "Y (sponge)" = % of yeast in sponge = 1.29 lbs yeast/100 lbs dough = 1.29%
- 9) "Ferm T + Dgh T (# hrs)" = Fermentation time for step 1 (sponge) and step 2 ("yeast dough" added to dough....see next column for step 2 fermentation time)
="Ferm T. sponge (hrs) + "Ferm T. dough (hrs)
= 4 hrs + 0.17 hrs = 4.17 hrs
- 10) "Ferm T. dough (# hrs.)" = Fermentation time for step 2, time for "yeast dough" to ferment in the dough
= 0.17 hrs
- 11) "Yeast dough (# lbs)" = % of step 2 yeast or "yeast dough" in the dough per 100 lbs of dough
= 1.57 # yeast dough in the dough.

- 12) "Y dough" = % of "Yeast dough (# lbs)" in 100 lbs of dough
= 1.57 lbs yeast/100 lbs dough = 1.57%
- 13) "YT.....+P+t, proof time" = [(initial yeast %) X (total fermentation time) + (remaining yeast %) X (remaining fermentation time)] + [(total yeast %)(additional fermentation time)]
= (1.29%)(4.17 hrs) + (1.5%)(0.17 hrs) + (1.29% + 1.57%)(1 hour)
= 8.49 (note that the spreadsheet carries more significant digits)
- 14) "ETOH LBS PER TON" is extrapolated from Table I in 8-42-602. Alternatively, use the following equation developed by the District, which was used to develop Table I.
Lbs of VOC = (0.4446 X Yt) + 0.4042
Lbs of VOC = (0.4446 x 8.47) + 0.4042 = 4.17 lbs VOC/ton of product

"ETOH LBS PER TON" is multiplied by the total weight of bread produced in the column "ETOH Lbs per week". The weekly emissions are then entered into the spreadsheet that summarizes the emissions for the year on a weekly basis. The emissions are also totaled for the year.

ENGINEERING EVALUATION (PUBLIC COPY)
Bemis Flexible Packaging - Milprint Div
Plant No. 20177
Banking Application No. 24574

BACKGROUND

Bemis Flexible Packaging - Milprint Div (Bemis) or Plant No. 20177 has applied for emission reduction credits (ERCs) corresponding to the permanent shutdown of the following equipment:

- S-17 #15 Extruder Laminator
- S-18 #15 Laminator Oven
- S-24 Line 15 Primer Station #2
- S-25 Line 15 - 2nd Coater Dryer
- S-26 Between Color and Tunnel Dryers
- S-27 Flexographic Printing Press P6
- S-28 Flexographic Printing Press - Dryer
- S-29 Flexographic Press P8
- S-30 Flexographic Printing Press P7 Dryer
- A-2 Catalytic Oxidizer
- A-3 Catalytic Oxidizer
- A-4 Thermal Regenerative

Bemis is a flexible packaging manufacturer that produced condiment packaging, lidding stock, and lettuce (or salad) bags. The manufacturing equipment at this site has been permanently shut down as of April 18, 2012. The operation and production at this site transferred to other Bemis sites located in Joplin, MO, Lancaster, WI, and Oshkosh, WI. Therefore, the ERCs from the permanent shutdown of S-17, S-18, S-24 through S-30, and A-2 through A-4 will not be replaced by any emission increase elsewhere within the District's jurisdiction.

The criteria pollutants for which Bemis has requested ERCs are nitrogen oxides (NO_x), carbon monoxide (CO), precursor organic compounds (POC), sulfur dioxide (SO₂), and particulate matter (PM). All of these pollutants are briefly discussed on the District's web site at www.baaqmd.gov.

This evaluation report will estimate the ERCs associated with the permanent shutdown of S-17, S-18, S-24 through S-30, and A-2 through A-4 at Bemis, and will discuss the compliance of the project with applicable rules and regulations.

EMISSION REDUCTION CREDITS SUMMARY

The District's ERC banking rule is Regulation 2, Rule 4. The emission calculation procedure in Section 2-4-601 refers to the emission calculation procedures in the New Source Review Rule, which is Regulation 2, Rule 2. For ERCs, the calculation procedure is described in Section 2-2-605.

This banking application was deemed complete in January 2013. However, because the data used to calculate the ERCs for this banking application are on a monthly basis, it is appropriate to start the baseline period from the beginning of January 2010. Therefore, the three-year baseline period for this banking application is 1/1/2010 through 12/31/2012.

The ERCs for this banking application are calculated as follows:

Solvent Sources (S-17, S-24, S-26, S-27, and S-29):

Bemis was a Synthetic Minor facility that was required to keep detailed recordkeeping of POC emissions to demonstrate that they were under the Major Facility emission thresholds. Bemis was required to record and calculate monthly POC emissions on a consecutive twelve-month basis. S-17 and S-24 are not fully offset sources. For these sources, Bemis has supplied the monthly POC emissions during the three-year baseline period in Appendix A. Appendix A also compares the monthly POC emissions with the data reported during annual updates.

S-26, S-27, and S-29 are fully offset sources. For these sources, which have emission caps (contained in Permit Condition No. 23913) that have been fully offset by the facility (without using emission reductions from the Small Facility Banking Account), the baseline throughputs and baseline emission rates will be based on the levels allowed by Permit Condition No. 23913.

The ERCs from the permanent shutdown of the solvent sources covered by this banking application are summarized in Table 1.

Table 1. Solvent ERCs from the permanent shutdown of S-17, S-24, S-26, S-27, and S-29

Source	Fully Offset?	Permit Limits on Non-Combustion Emissions (for fully offset sources only)	POC ERCs (TPY)
S-17	No	-	5.710 ¹
S-24	No	-	0.822
S-26	Yes for POC	39 TPY of POC	39.000
S-27	Yes for POC	28.33 TPY of total POC for S-27, S-29, and S-31	14.165 ²
S-29	Yes for POC	28.33 TPY of total POC for S-27, S-29, and S-31	14.165 ²
TOTAL			74.109

Notes:

1. Although Appendix A shows 5.957 TPY, the ERC will later be adjusted downward to 5.710 TPY, in order to comply with Regulation 8-20. The details of the adjustment can be found on page 4 of this evaluation report.
2. S-27, S-29, and S-31 were permitted as a group with an emission limit that was fully offset. Only S-27 and S-29 were installed, and the two presses were operating under the 28.33-TPY POC limit. S-31 was never installed or issued a Permit to Operate. Therefore, for each of S-27 and S-29, POC ERC will be 14.165 TPY (or half of the 28.33-TPY POC limit).

Combustion Equipment (S-18, S-25, S-26, S-28, S-30, and A-2 through A-4):

For purposes of ERC calculations, Bemis has provided the monthly natural gas fuel use data for all of the combustion equipment during the three-year baseline period in Appendix B.

As part of evaluation of a banking application, for purposes of verifying the data used to calculate ERCs, the District normally compares the data with those reported during annual updates. However, for these sources, because the data (i.e., facility-wide natural gas fuel use data) used to calculate ERCs could not be compared with those from annual updates, which asked for data at only some (and not all) combustion equipment, the District audited these data by comparing them with PG&E-issued natural gas purchase records for select months during the three-year baseline period.

For all of the combustion equipment covered by this banking application, the emission factors used to calculate the ERCs are as follows:

NOx:

According to Permit Condition No. 23913:

- For all combustion equipment except for A-4, NOx emission factor is 100 lb/MM scf (or 0.098 lb/MMBtu, using EPA-recommended average natural gas higher heating value of 1,020 Btu/scf), which is consistent with AP-42, Fifth Edition, Table 1.4-1.
- For A-4, NOx emission factor is 204 lb/MM scf (or 0.200 lb/MMBtu, using EPA-recommended average natural gas higher heating value of 1,020 Btu/scf).

CO, POC, PM₁₀, and SO₂:

Since Permit Condition No. 23913 does not specify any emission factors for CO, POC, PM₁₀, and SO₂, emission factors from AP-42, Fifth Edition, Tables 1.4-1 and 1.4-2 are used and summarized in Table 2.

Table 2. CO, POC, PM₁₀, and SO₂ emission factors from AP-42, Fifth Edition, Tables 1.4-1 and 1.4-2

Pollutant	AP-42 Emission Factor (lb/MM scf)	AP-42 Emission Factor (lb/MMBtu) ¹
CO	84	0.082
POC	5.5	0.0054
PM ₁₀ ²	7.6	0.0075
SO ₂	0.6	0.0006

Notes:

1. To convert from lb/MM cu ft to lb/MMBtu, divide by 1,020, per AP-42.
2. PM (Condensable) = 5.7 lb/MM cu ft, and PM (Filterable) = 1.9 lb/MM cu ft.

PM_{2.5}:

Per updated CEIDARS List with PM_{2.5} Fractions, PM_{2.5} fraction of PM₁₀ for gaseous fuel-fired external combustion equipment is 1.000. Therefore, PM_{2.5} emission factor is 7.6 lb/MM scf or 0.0075 lb/MMBtu.

The ERCs from the permanent shutdown of the combustion equipment covered by this banking application are calculated, using the data from Appendix B, and summarized in Table 3.

Table 3. Combustion ERCs from the permanent shutdown of S-18, S-25, S-26, S-28, S-30, and A-2 through A-4

Source	Rating (MM Btu /hr)	Natural Gas Use (% of facility wide natural gas use) ¹	Actual Natural Gas Use (MM Btu/yr) ¹	Natural Gas Use Limit (MM Btu/yr) ^{1,2}	Emission Factor (lb/MMBtu) ³						ERC (TPY) ^{4,5}					
					NOx	CO	POC	PM ₁₀	PM _{2.5}	SO ₂	NOx	CO	POC	PM ₁₀	PM _{2.5}	SO ₂
S-18	0.6	1.9	964	3,099	0.098	0.082	0.0054	0.0075	0.0075	0.0006	0.047	0.040	0.003	0.004	0.004	0.000
S-25	3	9.3	4,821	15,493	0.098	0.082	0.0054	0.0075	0.0075	0.0006	0.236	0.199	0.013	0.018	0.018	0.001
S-26	2,237	7.0	3,595	11,552	0.098	0.082	0.0054	0.0075	0.0075	0.0006	0.176	0.148	0.031	0.013	0.013	0.001
S-28	3,758	11.7	6,039	19,407	0.098	0.082	0.0054	0.0075	0.0075	0.0006	0.296	0.249	0.052	0.022	0.022	0.002
S-30	3.6	11.2	5,785	18,591	0.098	0.082	0.0054	0.0075	0.0075	0.0006	0.284	0.238	0.050	0.022	0.022	0.002
A-2	7.8	24.3	12,535	40,281	0.098	0.082	0.0054	0.0075	0.0075	0.0006	0.614	0.516	0.109	0.047	0.047	0.004
A-3	4.2	13.1	6,750	21,690	0.098	0.082	0.0054	0.0075	0.0075	0.0006	0.331	0.278	0.058	0.025	0.025	0.002
A-4	3	21.5	11,090	35,636	0.200	0.082	0.0054	0.0075	0.0075	0.0006	1.109	0.457	0.096	0.041	0.041	0.003
TOTAL		100.0	51,579	165,750							3.094	2.124	0.412	0.192	0.192	0.015

Notes:

1. Per Condition 23913, 21.5% of facility wide natural gas use is assumed to be used to fire A-4. The rest of natural gas use is scaled for the remaining sources and abatement devices by each device's rating.
2. Per Condition 23913, facility wide natural gas use is limited to 162.5 MM scf/yr or 165,750 MMBtu/yr (using EPA-recommended average natural gas higher heating value of 1,020 Btu/scf).
3. Emission factors are from AP-42, except for NOx for A-4, which is 204 lb/MM scf per item 35.2 of Condition 23913. The AP-42 NOx emission factor for all of the sources and abatement devices, except for A-4, is the same as the NOx emission factor specified in item 33.1 of Condition 23913.
4. For NOx, CO, PM₁₀, PM_{2.5}, and SO₂, ERC = (Actual Natural Gas Use) * (EF), because the sources are not fully offset with respect to these pollutants.
5. For POC: (i) ERC = (Actual Natural Gas Use) * (EF), for sources not fully offset (i.e., S-18 and S-25); and (ii) ERC = (Natural Gas Use Limit) * (EF), for sources fully offset with respect to POC (i.e., S-26, S-28, S-30, A-2, A-3, and A-4).

Regulation 2-2-605.5 requires adjustments of the baseline emission rate to comply with the most stringent of RACT, BARCT, and District rules and regulations in effect or contained in the most recently adopted Clean Air Plan (CAP). These adjustments are as follows:

Adjustment #1: Permit Limits

S-17, S-18, S-24 through S-30, and A-2 through A-4 were subject to Permit Condition No. 23913, which has the following limits:

- 12.3 TPY of POC emissions from S-24 and S-25.
- 39 TPY of POC emissions from S-26.
- 28.33 TPY of POC emissions from S-27, S-29, and S-31.
- 9.9 TPY of NOx emissions from all combustion equipment.
- 162.5 MM scf/yr of natural gas usage at all combustion equipment.

According to Tables 1 and 3:

- POC emissions from S-24 and S-25 are $0.822 \text{ TPY} + 0.013 \text{ TPY} = 0.835 \text{ TPY}$.
- POC emissions from S-26 are 39.000 TPY.
- POC emissions from S-27 and S-29 are $14.165 \text{ TPY} + 14.165 \text{ TPY} = 28.330 \text{ TPY}$.
- NOx emissions from all combustion equipment are 3.094 TPY.
- Natural gas usage at all combustion equipment does not exceed 165,750 MMBtu/yr (or 162.5 MM scf/yr, using EPA-recommended average natural gas higher heating value of 1,020 Btu/scf).

The emissions in Tables 1 and 3 are the same as or lower than the limits in Permit Condition No. 23913. In addition, District's databank shows that Bemis was never issued any Notices of Violation (NOVs) during the three-year baseline period. This means Bemis was in compliance with its permit limits during the baseline period of this banking application. Therefore, the baseline emissions from S-17, S-18, S-24 through S-30, and A-2 through A-4 do not need to be adjusted downward to comply with the limits set forth in Permit Condition No. 23913.

Adjustment #2: Current District's Rules and Regulations

S-17, S-24, S-26, S-27, and S-29 were subject to Regulation 8-20. Per Section 8-20-308, the limits for the flexographic ink and cleaning solvent do not apply when the owner/operator controls emissions of VOC to the atmosphere with an emission control system that meets the requirements of Regulation 2-1, and has a collection and control efficiency of at least 75% overall on a mass basis. No changes are being made to Section 8-20-308.

For S-17: Table A1 in Appendix A shows 75% control efficiency is not applied to the VOC emissions from the use of cleanup solvents at S-17. In order to comply with Section 8-20-308, Bemis has agreed to apply 75% control efficiency to the VOC emissions from the use of cleanup solvents at S-17. Appendix C shows the adjusted emissions at S-17.

For S-24: Bemis abated all VOC emissions from S-24 with A-2, A-3, and/or A-4, each of which was required to meet a 75% VOC capture and destruction efficiency. Therefore, the emissions from the source were in compliance with Section 8-20-308.

For S-26: Under Application No. 17637 (approved in 1997), the 39.000-TPY limit of POC emissions was established with a basis of 2.5-lb/gal VOC content for water-borne ink applications and 75% VOC capture and destruction efficiency for solvent-borne ink applications. This basis is consistent with the current applicable Regulation 8-20 standards (i.e., 2.5-lb/gal VOC content limit for flexographic ink on non-porous substrate per Section 8-20-302 and 75% VOC capture and destruction efficiency limit per Section 8-20-308). Therefore, the emissions from the source were in compliance with Sections 8-20-302 and 8-20-308.

For S-27 and S-29: Under Application No. 12013 (approved in 2006), the 28.330-TPY limit of POC emissions was established with a basis of 97% VOC capture and destruction

efficiency. Therefore, the emissions from the sources were in compliance with Section 8-20-308.

No further adjustment to the baseline emissions of VOC, or POC, is required.

S-18, S-25, the dryer at S-26, S-28, and S-30 were not subject to Regulation 9-7 because they were ovens used for drying, and this is in accordance with Section 9-7-110.6. Therefore, no adjustment to the baseline emissions is required.

Adjustment #3: Current Clean Air Plan

The most current Clean Air Plan (CAP) is the 2010 CAP. There are 18 stationary source control measures contained in the 2010 CAP, adopted on September 15, 2010. Operations of sources and abatement devices such as S-17, S-24, S-26, S-27, S-29, and A-2 through A-4 at Bemis are not included in the 2010 CAP. However, operations of sources such as S-18, S-25, the dryer at S-26, S-28, and S-30 are contained in the 2010 CAP under Stationary Source Measure (SSM) 13 for dryers, ovens, and kilns exempt from the requirements of Regulation 9-7.

SSM 13 recommends a rule similar to SCAQMD Rule 1147. However, per Dan Belik, an Air Quality Program Manager in District's Planning and Research Division, it is uncertain at the time this banking application is being evaluated as to whether or not the limits in SCAQMD Rule 1147 are applicable to dryers in the Bay Area because cost effectiveness has yet to be analyzed. In addition, per Mr. Belik, the District has yet to go through the rule development process for these dryers covered under SSM 13. Therefore, the baseline emissions from S-18, S-25, the dryer at S-26, S-28, and S-30 will not be adjusted downward to comply with SSM 13 of District's 2010 CAP.

ERCs for this banking application, which are calculated in Table 3 and Appendices A and C, are summarized as follows:

Table 4. Summary of Total ERCs from the permanent shutdown of S-17, S-18, S-24 through S-30, and A-2 through A-4

Source/Abatement Device No.	ERC (TPY)					
	NOx	CO	POC	PM ₁₀ ¹	PM _{2.5} ¹	SO ₂
S-17	-	-	5.710	-	-	-
S-18	0.047	0.040	0.003	0.004	0.004	0.000
S-24	-	-	0.822	-	-	-
S-25	0.236	0.199	0.013	0.018	0.018	0.001
S-26	0.176	0.148	39.031	0.013	0.013	0.001
S-27	-	-	14.165	-	-	-
S-28	0.296	0.249	0.052	0.022	0.022	0.002
S-29	-	-	14.165	-	-	-
S-30	0.284	0.238	0.050	0.022	0.022	0.002
A-2	0.614	0.516	0.109	0.047	0.047	0.004
A-3	0.331	0.278	0.058	0.025	0.025	0.002
A-4	1.109	0.457	0.096	0.041	0.041	0.003
TOTAL	3.094	2.124	74.274	0.192	0.192	0.015

Note:

1. The PM₁₀ ERC total includes the PM_{2.5} listed here.

SMALL FACILITY BANK AND BANKING ACCOUNT

Bemis had not been the recipient of any offsets from the Small Facility Banking Account (SFBA). Therefore, no such emission offsets are required to be repaid to the SFBA as per Regulation 2-4-303.5.

STATEMENT OF COMPLIANCE

The ERCs are subject to and expected to comply with the standards of Regulation 2-4-302 for Bankable Reductions for Closures. Per Regulation 2-4-302.1, the ERCs from the permanent shutdown or closure of S-17, S-18, S-24 through S-30, and A-2 through A-4 are bankable because the emission reductions are permanent and will not be replaced by any emission increase elsewhere within the District. Per Regulation 2-4-302.2, issuance of a Banking Certificate for emission reductions resulting from the closure of S-17, S-18, S-24 through S-30, and A-2 through A-4 cancels the permits to operate the sources and abatement devices.

The ERC calculations were performed in accordance with the methodology outlined in Regulation 2-2-605. ERCs from the permanent shutdown of S-17, S-18, S-24 through S-30, and A-2 through A-4 were calculated based on the following information during the three-year baseline period from 1/1/2010 through 12/31/2012: (1) actual solvent use data for sources S-17 and S-24, (2) emission caps allowed by Permit Condition No. 23913 for fully offset sources S-26, S-27, and S-29, and (3) actual natural gas fuel use data for all combustion sources.

To comply with the requirements in Regulation 2-2-605.5, the bankable ERCs were compared with the most stringent of RACT, BARCT, and District rules and regulations in effect or contained in the most recently adopted Clean Air Plan. In order to comply with the limits set forth in Regulation 8-20, Bemis agreed to adjust the calculated VOC emissions from the use of cleanup solvents at S-17 downward by applying 75% control efficiency, when in actuality the VOC emissions were not abated. The bankable ERCs are in compliance with other applicable District rules and regulations. The bankable ERCs did not require adjustments to comply with the District's 2010 CAP. No further adjustments to the baseline emission rates are required.

Based on the data provided by Bemis, the ERCs are real, quantifiable, enforceable, and permanent as required by the definition of Emission Reduction Credit in Regulation 2-2-201.

The ERCs from the permanent shutdown of S-17, S-18, S-24 through S-30, and A-2 through A-4 exceed 40 tons/yr of POC, and the application is therefore subject to Publication, Public Comment and Inspection of Regulation 2-4-405. A Notice Inviting Written Public Comment was published in the Oakland Tribune newspaper on March 12, 2013. The District also sent a notification of our preliminary decision to EPA Region IX, ARB, SJVUAPCD, SMAQMD, and YSAQMD. The comment period ended on April 16, 2013. The District did not receive any written comments.

The project is exempt from CEQA pursuant to Regulation 2-1-312.10. Bemis has completed and signed a BAAQMD Appendix H Environmental Information Form to ensure that the project has no potential for causing a significant adverse impact on the environment.

A toxics risk screening analysis is not required since there is no emission increase associated with the project.

PSD, Offsets, NSPS, and NESHAPS do not apply.

CONDITIONS

No conditions are required for this banking application. Conditions are commonly imposed on banking applications when an emission reduction is permanent at the source but it is unclear whether the reduction will be replaced by an emission increase elsewhere at the facility or within the District, or to ensure the permanency of the closure. Per Division policy, conditions are not necessarily needed in circumstances where the source, if operated in the future within the physical jurisdictional boundaries of the Bay Area Air Quality Management District, would be treated as a new source subject to New Source Review.

RECOMMENDATION

Staff recommends the District issue a ~~30-day public notice regarding the preliminary decision to approve the~~ following ERCs for emission reductions that occurred at Bemis:

<u>Pollutant:</u>	<u>ERC Amount (TPY):</u>
NOx	3.094
CO	2.124
POC	74.274
PM ₁₀ ¹	0.192
PM _{2.5} ¹	0.192
SO ₂	0.015

¹Note: The PM₁₀ ERC total includes the PM_{2.5} listed here.

Mail the Banking Certificate to the owner:

Howard Hofmeister
Director, Environmental Affairs
Bemis Company
2200 Badger Avenue
Oshkosh, WI 54904

By: Kevin Oei
Kevin Oei
Air Quality Engineer

Date: 4/16/13

Appendix A. Monthly POC Emissions at S-17 and S-24 from Bemis

Table A1. Monthly POC emissions at S-17 and S-24 from Bemis

Months	Pre-Abatement Emissions of POC (lbs)					Abated Emissions of POC (lbs)		
	From Solvent Based Coating (Primer) ¹	From Make Up Solvent ¹	From Clean Up Solvent ¹	S-17 ²	S-24 ³	S-17 ⁴	S-24 ⁵	
January-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,166	5	
February-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,380	78	
March-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,369	58	
April-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	825	0	
May-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,466	156	
June-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,005	41	
July-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,759	108	
August-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	2,392	411	
September-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,091	0	
October-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,546	284	
November-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	602	274	
December-10	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	997	593	
January-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	556	0	
February-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	785	127	
March-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	2,009	877	
April-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	770	0	
May-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	698	0	
June-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	841	33	
July-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,004	0	
August-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	2,169	766	
September-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,456	0	
October-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	2,349	522	
November-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,818	586	
December-11	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	1,311	0	
January-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	2,315	1,133	
February-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	700	0	
March-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	854	0	
April-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	506	0	
May-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	0	0	
June-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	0	0	
July-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	0	0	
August-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	0	0	
September-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	0	0	
October-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	0	0	
November-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	0	0	
December-12	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	0	0	
Annual Average	(lb/yr)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	11,913	2,018
	(TPY)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	(Trade secret info)	5,957	1,009

Notes:

1. Total POC emissions, pre-abatement, for both S-17 and S-24. Details of the monthly solvent throughputs and POC emission calculations by Bemis may be found in the application folder.
2. (Total Coating POC) + (Total Make Up Solvent POC) + (Total Clean Up Solvent POC) - (Pre-Abatement POC at S-24).
3. Details of the monthly solvent throughputs and POC emission calculations by Bemis may be found in the application folder.

4. $\{(Total\ Coating\ POC) + (Total\ Make\ Up\ Solvent\ POC)\} \times (1 - 75\%) + (Total\ Clean\ Up\ Solvent\ POC) - (Abated\ POC\ at\ S-24)$.
3. $(Pre-Abatement\ POC\ at\ S-24) \times (1 - 75\%)$.

Comparisons with Data Reported during Annual Updates:

During annual updates, Bemis reported the following abated emissions of POC:

- For a period from 11/1/2009 to 10/31/2010: 26,316 lbs for S-17 and 33 lbs for S-24.
- For a period from 11/1/2010 to 10/31/2011: 21,452 lbs for S-17. The District did not request any data for S-24.

Notes: The above emissions were calculated based on the throughput amounts reported during annual updates. Details of the calculations can be found in Tables A2 and A3.

Table A2. POC emissions at S-17 and S-24 based on annual updates data for period from 11/1/2009 to 10/31/2010

Source	Material	VOC Content (%)	VOC Density (lb/gal)	Compound Fraction in VOC (%)	Usage (gal/yr)	VOC Emissions, Unabated (lb/yr)	VOC Emissions, Unabated (TPY)	VOC Emissions, Abated (lb/yr)	VOC Emissions, Abated (TPY)
S-17	Primer	99.9	7	100	10,438	72,993	36.496	18,248	9.124
	Primer	57.5	7.5	100	2,274	9,807	4.903	2,452	1.226
	Cleanup	100	7.5	100	179	1,343	0.671	1,343	0.671
	Ethyl Acetate	100	7.5	100	2,274	17,055	8.528	4,264	2.132
	Polymerizing Cat	35	7.5	99.3	15	39	0.020	10	0.005
Grand Total						101,236	50.618	26,316	13.158
S-24	IPA	100	6.6	100	20	132	0.066	33	0.017
	Grand Total						132	0.066	33

Table A3. POC emissions at S-17 and S-24 based on annual updates data for period from 11/1/2010 to 10/31/2011

Source	Material	VOC Content (%)	VOC Density (lb/gal)	Compound Fraction in VOC (%)	Usage (gal/yr)	VOC Emissions (lb/yr)	VOC Emissions (TPY)	VOC Emissions, Abated (lb/yr)	VOC Emissions, Abated (TPY)
S-17	Primer	99.9	7	100	9,540	66,713	33.357	16,678	8.339
	Primer	57.5	7.5	100	454	1,958	0.979	489	0.245
	Cleanup	100	7.5	100	0	0	0.000	0	0.000
	Ethyl Acetate	100	7.5	100	2,285	17,138	8.569	4,284	2.142
	Polymerizing Cat	35	7.5	99.3	0	0	0.000	0	0.000
Grand Total						85,809	42.904	21,452	10.726
S-24	IPA	100	6.6	100	N/A	N/A	N/A	N/A	N/A
	Grand Total						N/A	N/A	N/A

According to the data from Table A1, the abated emissions of POC are as follows:

- For a period from 11/1/2009 to 10/31/2010: 17,742 lbs for S-17 and 1,757 lbs for S-24.
- For a period from 11/1/2010 to 10/31/2011: 14,237 lbs for S-17.

Note: Bemis also supplied the monthly POC emissions (abated) for calendar year 2009, which are not displayed in Table A1 but may be found in the application folder.

The data in Table A1 for S-17 are more conservative than those reported during annual updates, and will therefore be used as a basis for calculating ERCs for the source. The data in Table A1 for S-24, however, are less conservative than those reported during annual updates, and therefore need to be adjusted downward to be consistent with the annual updates data for the period from 11/1/2009 to 10/31/2010. This adjustment is shown in Table A4.

Table A4. Monthly abated emissions of POC at S-17 and S-24, after adjustment to be consistent with annual updates data

Months	Abated Emissions of POC (lbs)	
	S-17	S-24 ¹
January-10	1,166	0
February-10	1,380	1
March-10	1,369	1
April-10	825	0
May-10	1,466	3
June-10	1,005	1
July-10	1,759	2
August-10	2,392	8
September-10	1,091	0
October-10	1,546	5
November-10	602	274
December-10	997	593
January-11	556	0
February-11	785	127
March-11	2,009	877
April-11	770	0
May-11	698	0
June-11	841	33
July-11	1,004	0
August-11	2,169	766
September-11	1,456	0
October-11	2,349	522
November-11	1,818	586
December-11	1,311	0
January-12	2,315	1,133
February-12	700	0
March-12	854	0
April-12	506	0
May-12	0	0
June-12	0	0
July-12	0	0
August-12	0	0
September-12	0	0
October-12	0	0
November-12	0	0
December-12	0	0
Annual Average (lb/yr)	11,913	1,644
Annual Average (TPY)	5.957	0.822

Note:

1. To be consistent with the annual updates data, the data for period from 11/1/2009 to 10/31/2010 have been adjusted downward as follows: (Data in Table A1)*(33 lbs/1,757 lbs).

Appendix B. Monthly Natural Gas Fuel Use at All Combustion Equipment from Bemis

Table B1. Monthly natural gas fuel use data at all combustion equipment

Month	Natural Gas Use (therms)
January-10	44,949
February-10	65,387
March-10	54,880
April-10	53,951
May-10	53,706
June-10	43,570
July-10	47,756
August-10	52,350
September-10	51,331
October-10	51,409
November-10	47,240
December-10	48,518
January-11	70,487
February-11	71,630
March-11	65,822
April-11	66,208
May-11	65,268
June-11	57,225
July-11	58,654
August-11	62,550
September-11	51,763
October-11	48,316
November-11	66,294
December-11	51,735
January-12	63,448
February-12	75,295
March-12	57,641
April-12	-
May-12	-
June-12	-
July-12	-
August-12	-
September-12	-
October-12	-
November-12	-
December-12	-
36-Month Total (therms)	1,547,383
Annual Average (therms/yr)	515,794
Annual Average (MMBtu/yr)	51,579

Appendix C. Adjusted POC Emissions at S-17

Table C1. Adjusted POC emissions at S-17

Months	Abated Emissions of POC at S-17 (lbs) ¹	
January-10	1,166	
February-10	1,335	
March-10	1,324	
April-10	825	
May-10	1,362	
June-10	982	
July-10	1,493	
August-10	2,280	
September-10	1,091	
October-10	1,516	
November-10	587	
December-10	940	
January-11	556	
February-11	763	
March-11	1,799	
April-11	770	
May-11	698	
June-11	781	
July-11	955	
August-11	2,135	
September-11	1,411	
October-11	2,319	
November-11	1,750	
December-11	1,195	
January-12	2,165	
February-12	700	
March-12	854	
April-12	506	
May-12	0	
June-12	0	
July-12	0	
August-12	0	
September-12	0	
October-12	0	
November-12	0	
December-12	0	
Annual Average	(lb/yr)	11,420
	(TPY)	5.710

Note:

1. $\{(Total\ Coating\ POC\ from\ Table\ A1) + (Total\ Make\ Up\ Solvent\ POC\ from\ Table\ A1) + (Total\ Clean\ Up\ Solvent\ POC\ from\ Table\ A1)\} \times (1 - 75\%) - (Abated\ POC\ at\ S-24\ from\ Table\ A1)$.

ENGINEERING EVALUATION
New WinCup Holdings, Inc.
Plant No. 18198
Banking Application No. 24085

BACKGROUND

New WinCup Holdings, Inc. (WinCup) has applied for emission reduction credits (ERCs) corresponding to the permanent shutdown of the following equipment:

Two natural gas fired boilers:

- S-1 3-PASS, Steam Boiler, 600 HP
- S-2 4-PASS, Steam Boiler, 500 HP

29 foam cup molding production lines:

- S-4 Foam Cup Molding Lines 1-10
- S-5 Foam Cup Molding Lines 11-16
- S-6 Foam Cup Molding Lines 17-25
- S-7 Foam Cup Molding Lines 27-30

Five pre-expander lines:

- S-11 Pre-Expander
- S-12 Pre-Expander
- S-13 Pre-Expander
- S-14 Pre-Expander
- S-15 Pre-Expander

Note: S-11 through S-15 were abated by S-1 and S-2

A cold solvent degreaser and a cold solvent cleaning operation:

- S-17 Cold Cleaner
- S-41 Solvent Cleaning Operation

WinCup produced expanded polystyrene (EPS) foam cups and foam containers. The facility in Corte Madera, California (BAAQMD Plant No. 18198) was a major facility, as defined by Regulation 2-6-212. The facility ceased production of EPS cups and containers on April 21, 2011. WinCup has removed all of its equipment, including 13 sources described above, from service and from the facility site in 2011. The equipment has been relocated completely out of the jurisdiction of the District to a Wincup facility in Arizona.

The criteria pollutants for which WinCup has requested ERCs are nitrogen oxides (NO_x), carbon monoxide (CO), precursor organic compounds (POC), sulfur dioxide (SO₂), and particulate matter (PM₁₀). All of these pollutants are briefly discussed on the District's web site at www.baaqmd.gov.

This evaluation report will estimate the ERCs associated with the permanent shutdown of S-1, S-2, S-4 through S-7, S-11 through S-15, S-17, and S-41 at WinCup and will discuss the compliance of the project with applicable rules and regulations.

EMISSIONS REDUCTION CREDITS SUMMARY

The District's ERC banking rule is Regulation 2, Rule 4. The emission calculation procedure in Section 2-4-601 refers to the emission calculation procedures in the New Source Review Rule, which is Regulation 2, Rule 2. For ERCs, the calculation procedure is described in Section 2-2-605.

This banking application was deemed complete in January 31, 2012. The baseline period for this application is February 1, 2009 through January 31, 2012.

For purposes of ERCs calculation:

- For S-1 and S-2, WinCup has provided monthly natural gas fuel use data, which are from Pacific Gas & Electric (PG&E) utility bills, for the boilers during the three-year baseline period. Appendix A tabulates and compares these data with the natural gas fuel use amounts reported during annual updates.
- For S-4 through S-7 and S-11 through S-15, WinCup has provided monthly EPS use data for the sources during the three-year baseline period. Appendix B tabulates and compares these data with the EPS use amounts reported during annual updates.
- For S-17, WinCup has provided monthly anhydrol (ethanol) use data for the source during the three-year baseline period. Appendix C tabulates and compares these data with anhydrol use amounts reported during annual updates.
- For S-41, WinCup has provided monthly Wash Up Evap A solvent use data for the source during the three-year baseline period. Appendix D tabulates and compares these data with Wash Up Evap A solvent use amounts reported during annual updates.

Appendices A through D are summarized in Table 1.

Table 1. Annual average throughput data for S-1, S-2, S-4 through S-7, S-11 through S-15, S-17, and S-41

BASELINE PERIOD	S-1, MM CFT NAT GAS	S-2, MM CFT NAT GAS	POUNDS OF EPS USED	GALLONS OF ANHYDROL	GALLONS OF WASH UP EVAP A
Total (Feb 09 - Jan 12)	245.934	204.874	19,072,800	334	109
Annual Average (Feb 09 - Jan 12)	81.978	68.291	6,357,600	111	36

The sources covered under this banking application were subject to the following permit conditions:

- S-1 and S-2 were subject to Permit Condition No. 2055 (see Appendix E), which did not contain any limits on natural gas fuel throughputs for the boilers.
- S-4 through S-7 were not subject to any permit conditions. S-11 through S-15 were subject to Permit Condition No. 2055, which did not contain any limits on EPS throughputs for the sources.
- S-17 was subject to Permit Condition No. 12205 (see Appendix E), which limited net solvent usage at the source to no more than 300 gal/yr.
- S-41 was subject to Permit Condition No. 21882 (see Appendix E), which limited net solvent usage at the source to no more than 300 gal/yr, VOC content of solvent to no more than 7.02 lb/gal, and daily POC emissions to no more than 10 lb/day.

The anhydrol and Wash Up Evap A data in Table 1 do not exceed the applicable limits in Permit Condition Nos. 12205 and 21882.

The emission factors used to calculate the ERCs for this banking application are as follows:

For S-1 and S-2:

Based on the source test of S-1 conducted on June 20, 2007 by GE Energy, the NOx and CO emission factors were as follows:

NOx : 24.4 ppmv, dry at 3% O₂ = 2.96 x 10⁻² lb/MMBtu (x 1,020 Btu/scf) = 30.2 lb/MM cu ft
CO : 38.1 ppmv, dry at 3% O₂ = 2.81 x 10⁻² lb/MMBtu (x 1,020 Btu/scf) = 28.7 lb/MM cu ft

Based on the source test of S-2 conducted on June 20, 2007 by GE Energy, the NOx and CO emission factors were as follows:

NOx : 18.2 ppmv, dry at 3% O₂ = 2.21 x 10⁻² lb/MMBtu (x 1,020 Btu/scf) = 22.5 lb/MM cu ft
CO : 0.53 ppmv, dry at 3% O₂ = 3.92 x 10⁻⁴ lb/MMBtu (x 1,020 Btu/scf) = 0.40 lb/MM cu ft

POC, PM₁₀, and SO₂ ERCs are calculated based on the emission factors from AP-42, Fifth Edition, Table I.4-2 and are as follows:

POC emission factor : 5.5 lb/MM cu ft

PM₁₀ emission factor : 7.6 lb/MM cu ft

Note: PM (Condensable) = 5.7 lb/MM cu ft, and PM (Filterable) = 1.9 lb/MM cu ft.

SO₂ emission factor : 0.6 lb/MM cu ft

PM_{2.5} ERCs are calculated according to the updated CEIDARS List with PM_{2.5} Fractions, which states that PM_{2.5} fraction of PM₁₀ for gaseous fuel-fired external combustion equipment is 1.000.

For S-4 through S-7 and S-11 through S-15:

Per results of the District's compliance determination based on the source test conducted on August 26, 2003, the emission factor was as follows:

POC : 0.97 lb per 100 lbs of feed

For S-17:

Per MSDS for anhydrol, POC content is 789 g/l or 6.58 lb/gal. The organic solvents used at this source are assumed to be 100% volatile and emitted into the atmosphere. Therefore, the emission factor is as follows:

POC : 6.58 lb per gallon of anhydrol

For S-41:

Per the original permit application for the source (Application No. 9596, in 2004), POC content is 7.02 lb/gal. The organic solvents used at this source are assumed to be 100% volatile and emitted into the atmosphere. Therefore, the emission factor is as follows:

POC : 7.02 lb per gallon of Wash Up Evap A

Adjusted Emission Factors:

Regulation 2-2-605.5 requires adjustment of the baseline emission rate to comply with the most stringent of RACT, BARCT, and District rules and regulations in effect or contained in the most recently adopted Clean Air Plan (CAP). There are 18 stationary source control measures contained in the 2010 CAP, adopted on September 15, 2010. Operations of sources such as S-1, S-2, S-4 through S-7, S-11 through S-15, S-17, and S-41 at WinCup are not contained in the 2010 CAP.

S-1 and S-2 were subject to Regulation 9-7. Regulation 9-7-307.5 would limit the emissions from S-1, rated 23 MMBtu/hr, to 9 ppmv of NO_x and 400 ppmv of CO, both dry at 3% O₂. Regulation 9-7-307.3 would limit the emissions from S-2, rated 19.16 MMBtu/hr, to 15 ppmv of NO_x and 400 ppmv of CO, both dry at 3% O₂. The actual NO_x emissions from S-1 and S-2 (24.4 ppmv and 18.2 ppmv, respectively, both dry at 3% O₂) exceeded these Regulation 9-7 limits; therefore, the baseline emission rates of NO_x will be adjusted downward from 24.4 ppmv to 9 ppmv for S-1 and from 18.2 ppmv to 15 ppmv for S-2. Because the actual CO emissions from S-1 and S-2 (38.1 ppmv and 0.53 ppmv, respectively, both dry at 3% O₂) were lower than the limits in Regulation 9-7, the baseline emission rates of CO need no adjustments.

Adjusted baseline emission rate of NO_x for S-1:

NO_x : 9 ppmv, dry at 3% O₂ = 1.09×10^{-2} lb/MMBtu (x 1,020 Btu/scf) = 11.1 lb/MM cu ft

Adjusted baseline emission rate of NO_x for S-2:

NO_x : 15 ppmv, dry at 3% O₂ = 1.82×10^{-2} lb/MMBtu (x 1,020 Btu/scf) = 18.6 lb/MM cu ft

S-4 through S-7 and S-11 through S-15 were subject to and in compliance with Regulation 8-52. The sources had abatement devices (S-1 and S-2) with VOC destruction efficiency of at least 98% by weight. Therefore, the sources complied with Regulation 8-52-301 per Regulation 8-52-304. Therefore, there is no need for emission factor adjustments for S-4 through S-7 and S-11 through S-15.

S-17 and S-41 were subject to and in compliance with Regulation 8-16-303. S-17 was used to clean the ink rollers from printing operations, and S-41 was used to clean a variety of inks from printing operations. S-17 and S-41 were exempt from Regulation 8-16-303.5, pursuant to Regulation 8-16-123, so there were no limitations on the VOC contents of the cleaning solutions used at the sources. Therefore, there is no need for emission factor adjustments for S-17 and S-41.

The ERCs for this banking application are calculated as follows:

Table 2. ERCs from S-1

Source(s)	Pollutant	EF (lb/MM cu ft)	ERC (TPY)	EF Source
S-1	NOx	11.1	0.455	Regulation 9-7-307.5
	CO	28.7	1.176	Source test dated 6/20/2007
	POC	5.5	0.225	AP-42 Table 1.4-2
	PM ₁₀	7.6	0.312	AP-42 Table 1.4-2
	SO ₂	0.6	0.025	AP-42 Table 1.4-2
	PM _{2.5}	7.6	0.312	CEIDARS List with PM2.5 Fractions

Table 3. ERCs from S-2

Source(s)	Pollutant	EF (lb/MM cu ft)	ERC (TPY)	EF Source
S-2	NOx	18.6	0.635	Regulation 9-7-307.3
	CO	0.4	0.014	Source test dated 6/20/2007
	POC	5.5	0.188	AP-42 Table 1.4-2
	PM ₁₀	7.6	0.260	AP-42 Table 1.4-2
	SO ₂	0.6	0.020	AP-42 Table 1.4-2
	PM _{2.5}	7.6	0.260	CEIDARS List with PM2.5 Fractions

Table 4. ERCs from S-4 through S-7 and S-11 through S-15

Source(s)	Pollutant	EF (lb/100 lb feed)	ERC (TPY)	EF Source
S-4 through S-7 and S-11 through S-15	POC	0.97	30.834	Source test dated 8/26/2003

Table 5. ERCs from S-17

Source(s)	Pollutant	EF (lb/gal)	ERC (TPY)	EF Source
S-17	POC	6.58	0.366	MSDS

Table 6. ERCs from S-41

Source(s)	Pollutant	EF (lb/gal)	ERC (TPY)	EF Source
S-41	POC	7.02	0.128	Application 9596

Table 7. Total ERCs from S-1, S-2, S-4 through S-7, S-11 through S-15, S-17, and S-41

Pollutant	Total ERC (TPY)
NOx	1.090
CO	1.190
POC	31.741
PM ₁₀	0.571
SO ₂	0.045
PM _{2.5}	0.571

SMALL FACILITY BANK AND BANKING ACCOUNT

WinCup was a major facility and did not qualify for offsets from the Small Facility Banking Account (SFBA). Therefore, no such emission offsets are required to be repaid to the SFBA as per Regulation 2-4-303.5.

STATEMENT OF COMPLIANCE

The ERCs are subject to and expected to comply with the standards of Regulation 2-4-302 for *Bankable Reductions* for Closures. Per Regulation 2-4-302.1, the ERCs from the shutdown or closure of S-1, S-2, S-4 through S-7, S-11 through S-15, S-17, and S-41 are bankable because the emission reductions are permanent and will not be replaced by any emission increase elsewhere within the District. Per Regulation 2-4-302.2, issuance of a Banking Certificate for emission reductions resulting from the closure of S-1, S-2, S-4 through S-7, S-11 through S-15, S-17, and S-41 cancels the permits to operate the sources.

The ERC calculations were performed in accordance with the methodology outlined in Regulation 2-2-605. ERCs from the shutdown of S-1, S-2, S-4 through S-7, S-11 through S-15, S-17, and S-41 are calculated based on the actual average natural gas fuel use, EPS use, anhydrol use, and Wash Up Evap A solvent use data during the three-year baseline period from February 1, 2009 through January 31, 2012. The bankable ERCs required adjustments for S-1 and S-2 because the actual NOx emissions from these boilers were higher than the NOx limits in Regulation 9-7. The bankable ERCs did not require adjustments for S-4 through S-7, S-11 through S-15, S-17, and S-41 because the District's 2010 CAP does not provide stationary source control measures for these sources, and because operations of these sources would comply with the current, applicable District's rules and regulations.

Based on the data provided by WinCup, the ERCs are real, quantifiable, enforceable, and permanent as required by the definition of Emission Reduction Credit in Regulation 2-2-201.

The ERCs from the shutdown of S-1, S-2, S-4 through S-7, S-11 through S-15, S-17, and S-41 do not exceed 40 tons/yr of any criteria pollutant, and the application is therefore not subject to Publication, Public Comment and Inspection of Regulation 2-4-405.

The project is exempt from CEQA pursuant to Regulation 2-1-312.10. WinCup has completed and signed a BAAQMD Appendix H Environmental Information Form to ensure that the project has no potential for causing a significant adverse impact on the environment.

A toxics risk screening analysis is not required since there is no emission increase associated with the project.

PSD, Offsets, NSPS, and NESHAPS do not apply.

CONDITIONS

No conditions are required for this banking application. Conditions are commonly imposed on banking applications when an emission reduction is permanent at the source but it is unclear whether the reduction will be replaced by an emissions increase elsewhere at the facility or within the District, or to ensure the permanency of the closure. Per Division policy, conditions are *not necessarily needed* in circumstances where the source, if operated in the future within the physical jurisdictional boundaries of the Bay Area Air Quality Management District, would be treated as a new source subject to New Source Review.

RECOMMENDATION

Issue emission reduction credits (ERCs) to WinCup in the amounts shown below.

<u>Pollutant:</u>	<u>ERC Amount (TPY):</u>
NOx	1.090
CO	1.190
POC	31.741
PM ₁₀ (see *Note below)	0.571
SO ₂	0.045
PM _{2.5} (see *Note below)	0.571

*Note: The PM₁₀ ERC total includes the PM_{2.5} listed here.

Mail the Banking Certificate to the owner.

James H. Griffiths
Senior Vice President of Operations and Technology
New WinCup Holdings, Inc.
4640 Lewis Road
Stone Mountain, GA 30083

By:

Kevin Oei
Kevin Oei, Air Quality Engineer

Date:

12/12/2012

Appendix A
Monthly Natural Gas Fuel Use Data

Table A1. Monthly natural gas use data (total) for S-1 and S-2 provided by WinCup

CALENDAR MONTH	THERM FACTOR	PG&E THERMS	MM CFT NAT GAS
Feb-09	1.017	164,998	16.224
Mar-09	1.018	187,149	18.384
Apr-09	1.016	171,938	16.923
May-09	1.016	174,132	17.139
Jun-09	1.017	172,535	16.965
Jul-09	1.014	166,915	16.461
Aug-09	1.023	165,603	16.188
Sep-09	1.021	165,770	16.236
Oct-09	1.019	201,579	19.782
Nov-09	1.021	187,333	18.348
Dec-09	1.022	193,700	18.953
Jan-10	1.019	189,666	18.613
Feb-10	1.017	166,371	16.359
Mar-10	1.017	183,935	18.086
Apr-10	1.019	180,506	17.714
May-10	1.018	200,037	19.650
Jun-10	1.019	187,955	18.445
Jul-10	1.019	176,695	17.340
Aug-10	1.019	181,148	17.777
Sep-10	1.017	161,693	15.899
Oct-10	1.04	170,924	16.435
Nov-10	1.021	152,139	14.901
Dec-10	1.021	179,369	17.568
Jan-11	1.019	196,361	19.270
Feb-11	1.019	143,628	14.095
Mar-11	1.017	121,287	11.926
Apr-11	1.014	51,978	5.126

Note: From May 2011 forward, the use amount is zero.

Based on the data in Table A1, the natural gas use amount for the 12-month period ending 12/31/2009 is 2,137,378 therms and that for the period ending 12/31/2010 is 2,130,438 therms. These amounts are slightly different from those reported during annual updates (2.13×10^6 therms for the period ending 12/31/2009 and 2.12×10^6 therms for the period ending 12/31/2010). The differences are suspected due to round-off errors during annual updates because the amounts reported for S-1 during annual updates have only three significant figures. However, because the data in Table A1 are close to those reported during annual updates, the data in Table A1 are considered acceptable and therefore to be used as a basis for calculating ERCs.

From 2/1/2009 to 1/31/2012 (the whole baseline period), average actual natural gas use is 150.269 MM cu ft/yr.

WinCup always split the natural gas fuel consumption between the two boilers based on the burner ratings of the boilers (23 MMBtu/hr max for S-1 and 19.16 MMBtu/hr max for S-2). Therefore, from 2/1/2009 to 1/31/2012 (the whole baseline period), average actual natural gas use for S-1 is 81.978 MM cu ft/yr and for S-2 is 68.291 MM cu ft/yr.

Appendix B
Monthly EPS Use Data

Table B1. Monthly EPS use data for S-4 through S-7 and S-11 through S-15 provided by WinCup

CALENDAR MONTH	POUNDS OF EPS USED
Feb-09	706,200
Mar-09	783,200
Apr-09	709,400
May-09	688,600
Jun-09	693,000
Jul-09	660,000
Aug-09	624,800
Sep-09	684,200
Oct-09	829,400
Nov-09	752,400
Dec-09	792,000
Jan-10	741,400
Feb-10	591,800
Mar-10	776,600
Apr-10	734,800
May-10	844,800
Jun-10	844,800
Jul-10	851,400
Aug-10	847,000
Sep-10	697,400
Oct-10	774,400
Nov-10	677,600
Dec-10	761,200
Jan-11	957,000
Feb-11	510,400
Mar-11	378,400
Apr-11	160,600

Note: From May 2011 forward, the use amount is zero.

Based on the data in Table B1, the EPS use amount for the 12-month period ending 12/31/2009 is 4,332 tons and that for the period ending 12/31/2010 is 4,572 tons. These amounts are partially different from those reported during annual updates (4,332.3 tons for the period ending 12/31/2009 and 4,610.1 tons for the period ending 12/31/2010). Because the data in Table B1 are either the same as or lower than those reported during annual updates, these data are to be used as a basis for calculating ERCs.

From 2/1/2009 to 1/31/2012 (the whole baseline period), average actual EPS use is 6,357,600 lb/yr.

Appendix C
Monthly Anhydrol Use Data

Table C1. Monthly anhydrol use data for S-17 provided by WinCup

CALENDAR MONTH	GALLONS OF ANHYDROL ADDED
Feb-09	9
Mar-09	15
Apr-09	14
May-09	15
Jun-09	14
Jul-09	12
Aug-09	9
Sep-09	12
Oct-09	17
Nov-09	14
Dec-09	12
Jan-10	12
Feb-10	14
Mar-10	17
Apr-10	11
May-10	13
Jun-10	15
Jul-10	16
Aug-10	12
Sep-10	10
Oct-10	14
Nov-10	9
Dec-10	15
Jan-11	12
Feb-11	12
Mar-11	9
Apr-11	0

Note: From May 2011 forward, the use amount is zero.

Based on the data in Table C1, the anhydrol use amount for the 12-month period ending 12/31/2009 is 161 gallons and that for the period ending 12/31/2010 is 158 gallons. These amounts are partially different from those reported during annual updates (209.0 gallons for the period ending 12/31/2009 and 158.0 gallons for the period ending 12/31/2010). Because the data in Table C1 are either the same as or lower than those reported during annual updates, these data are to be used as a basis for calculating ERCs.

From 2/1/2009 to 1/31/2012 (the whole baseline period), average actual anhydrol use is 111 gal/yr.

Appendix D
Monthly Wash Up Evap A Solvent Use Data

Table D1. Monthly Wash Up Evap A solvent use data for S-41 provided by WinCup

CALENDAR MONTH	GALLONS OF WASH UP EVAP A
Feb-09	0
Mar-09	0
Apr-09	12
May-09	12
Jun-09	0
Jul-09	0
Aug-09	20
Sep-09	0
Oct-09	15
Nov-09	5
Dec-09	0
Jan-10	0
Feb-10	0
Mar-10	10
Apr-10	5
May-10	0
Jun-10	10
Jul-10	0
Aug-10	0
Sep-10	0
Oct-10	10
Nov-10	0
Dec-10	0
Jan-11	0
Feb-11	10
Mar-11	0
Apr-11	0

Note: From May 2011 forward, the use amount is zero.

Based on the data in Table D1, the Wash Up Evap A solvent use amount for the 12-month period ending 12/31/2009 is 74 gallons and that for the period ending 12/31/2010 is 35 gallons. These amounts are different from those reported during annual updates (158.0 gallons for the period ending 12/31/2009 and 158.0 gallons for the period ending 12/31/2010). Because the data in Table D1 are lower than those reported during annual updates, these data are to be used as a basis for calculating ERCs.

From 2/1/2009 to 1/31/2012 (the whole baseline period), average actual Wash Up Evap A solvent use is 36 gal/yr.

Appendix E
Archived Permit Conditions

COND# 2055

S-1 and S-2 boilers, Wincup, P#18198, as amended in A#17170; and S-11 through S-15 pre-expanders

1. The owner/operator shall abate the volatile organic compound (VOC) emissions from S-11, S-12, S-13, S-14, S-15, S-25 through S-32, S-35, S-36, and S-37 at all times by S-1 and/or S-2 Boilers.
[Basis: Regulation 8, Rule 52]
2. The owner/operator shall maintain the VOC destruction efficiency of S-1 and S-2 Boilers at, or above, 98 percent by weight.
[Basis: Regulation 8, Rule 52]
3. The owner/operator shall maintain the operating temperature of S-1 Boiler at, or above, 1500 degrees Fahrenheit and S-2 Boiler at, or above, 1150 degrees Fahrenheit.
[Basis: Regulation 2-1-403]
4. The owner/operator shall monitor and record the operating temperature of each boiler using a continuous temperature chart recorder. These temperature records shall be retained on site for a minimum of five years from the date of entry and made available to District personnel upon request.
[Basis: Recordkeeping]

COND# 12205

S-17 solvent cleaning operation

1. The owner/operator shall not exceed 300 gallons of net solvent usage at S-17 in any consecutive twelve month period. [Cumulative increase]
2. The owner/operator of S-17 shall maintain records of net solvent usage (based upon net make-up solvent added to S-17) on a monthly basis in a District-approved log. These records shall be retained on site for a minimum of five years from the date of entry and made available to District representatives upon request. [Cumulative increase]

COND# 21882

Permit conditions for S-41 Solvent Cleaning Operation,
Wincup, Plant #1317, A#9596

1. Owner/operator shall not exceed 300 gallons solvent throughput in any consecutive 12-month period. [Basis: Cumulative increase]
2. Owner/operator shall not use any clean-up solvent with a volatile organic compound (VOC) content in excess of 7.02 lb/gal. [Basis: Cumulative increase]
3. Owner/operator shall not exceed 10 lbs/average operating day POC emissions. [Basis: BACT]
4. Owner/operator shall obtain written authorization from the District prior to using any clean-up solvent other than "Evap-A". [Basis: Cumulative increase, Toxics]
5. Owner/operator shall maintain records of ink and clean-up solvent usage on a monthly basis in a District-approved logbook. Records shall be maintained on-site for a period of at least 5 years from date of entry. The logs shall be made readily available to District staff upon request. [Basis: Recordkeeping]