South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

October 17, 2012

Mr. Gerardo Rios
Chief – Permit Office
US EPA, Region IX Air 3
75 Hawthorne Street
San Francisco, CA 94105

Subject: Title V/RECLAIM Permit Revision - Kirkhill – TA Company (ID 1744)

Dear Mr. Rios:

Kirkhill-TA (ID 1744) located at 300 E. Cypress Street in the City of Brea, CA has proposed to revise their Title V/RECLAIM Permit by installing a new scrubber, electrostatic precipitator, HEPA filter, and modifying six ovens by venting them to the air pollution control devices mentioned above. The proposed permit revision is considered a "minor permit revision" to their Title V/RECLAIM Permit. Enclosed for your review are the permit evaluation and draft permit facility section H of the proposed permit revision. With your expected receipt of the proposed Title V/RECLAIM permit revision on October 17, 2012, we will note that the EPA 45-day period will begin on that date.

If you have any questions concerning the proposed Title V/RECLAIM renewal permit, please contact Erwin dela Cruz, Air Quality Engineer, at 909.396.2528 or you may contact him by email at edelacruz@aqmd.gov.

Sincerely,

Brian L. Yeh
Senior Engineering Manager
Mechanical, Chemical, and Public Services

BLY:edd

Enclosures:
Proposed Title V/RECLAIM Permit Revision
Engineering Evaluation

FACILITY PERMIT TO OPERATE

KIRKHILL - TA COMPANY
300 E CYPRESS ST
BREA, CA 92821

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By_____
Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
[redacted]					
OVEN, CURING, ELECTRIC, YOUNG BROTHERS, 90 KVA A/N:	D54	C160		PM: (9) [RULE 405, 2-7-1986]	B27.6, C1.11, D323.2, E57.3
OVEN, CURING, NATURAL GAS, K. J. CALLAHAN, 0.6 MMBTU/HR A/N:	D55	C160	NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B27.6, C1.11, D323.2, E57.3
OVEN, CURING, ELECTRIC, GRIEVE-HENDRY, 40 KW A/N:	D56	C160		PM: (9) [RULE 405, 2-7-1986]	B27.6, C1.11, D323.2, E57.3
OVEN, CURING, NO. 7, NATURAL GAS, MILMETCO, 0.5 MMBTU/HR A/N:	D57	C160	NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B27.6, C1.11, D323.2, E57.3
OVEN, CURING, NO. 8, NATURAL GAS, CALLAHAN, 0.6 MMBTU/HR A/N:	D58	C160	NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B27.6, C1.11, D323.2, E57.3

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
OVEN, CURING, NATURAL GAS, IMMERSOPAK BURNER, 0.33 MMBTU/HR A/N:	D59	C160	NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: NATURAL GAS (2A) [RULE 2002, 1-7-2005]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 12-7-1995; *RULE 2012, 4-9-1999;* RULE 2012, 5-6-2005]; PM: (9) [RULE 405, 2-7-1986]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B27.6, C1.11, D323.2, E57.3
OVEN, CURING, DESPATCH, ELECTRIC, MODEL PSC3-24, SERIAL NO. 11109, 51KW. A/N:	D128	C157		PM: (9) [RULE 405, 2-7-1986]	B27.6, C1.3, D323.2
SCRUBBER, CENTRIFUGAL, AMERICAN AIR FILTER, MODEL TYPE W ROTOCLONE A/N:	C157	D128 C158		PM: (9) [RULE 404, 2-7-1986]	H23.7, K67.4
ELECTROSTATIC PRECIPITATOR, UNITED AIR SPECIALISTS, MODEL PSG-12-2 A/N:	C158	C157 C159		PM: (9) [RULE 404, 2-7-1986]	D323.1, E202.1, H23.7, K67.3
FILTER, HEPA, AMERICAN AIR FILTER, MODEL FILTER LINE FLH A/N:	C159	C158		PM: (9) [RULE 404, 2-7-1986]	D323.2
SCRUBBER, CENTRIFUGAL, AMERICAN AIR FILTER, MODEL TYPE W ROTOCLONE SIZE 20 A/N:	C160	D54 D55 D56 D57 D58 D59 C161		PM: (9) [RULE 404, 2-7-1986]	H23.7, K67.4

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
ELECTROSTATIC PRECIPITATOR, UNITED AIR SPECIALISTS, MODEL PSG-32-2 A/N:	C161	C160 C162		PM: (9) [RULE 404, 2-7-1986]	D323.1, E202.1, H23.7, K67.3
FILTER, HEPA, AMERICAN AIR FILTER, MODEL FILTER LINE FLH A/N:	C162	C161		PM: (9) [RULE 404, 2-7-1986]	D323.2

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: DEVICE ID INDEX

The following sub-section provides an index to the devices that make up the facility description sorted by device ID.

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: DEVICE ID INDEX

Device Index For Section H			
D54	1	2	5
D55	1	2	5
D56	1	2	5
D57	1	2	5
D58	1	2	5
D59	2	2	5
D128	2	2	5
C157	2	2	5
C158	2	2	5
C159	2	2	5
C160	2	2	5
C161	3	2	5
C162	3	2	5

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F1.1 The operator shall limit the material processed to no more than 855,500 lb(s) in any one month.

The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition.

For the purpose of this condition, material processed shall be defined as all material processed through equipment vented to air pollution control device C100.

For the purpose of this condition, equipment vented to air pollution control divice C100 shall be defined as Devices D12, D20, D134, D137 and D138.

F1.2 The operator shall limit the material processed to no more than 284,507 lb(s) in any one month.

The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition.

For the purpose of this condition, material processed shall be defined as all material processed through equipment vented to air pollution control device C139.

For the purpose of this condition, equipment vented to air pollution control device C139 shall be defined as Devices D21, D25, D141, D147, D149 and D152.

DEVICE CONDITIONS

B. Material/Fuel Type Limits

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

B27.6 The operator shall not use materials containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401 (except for those compounds listed below), as amended 09/10/2010.

1. 1,3 Butadiende (CAS NO. 106-99-0)
2. Acrylonitrile (CAS NO. 107-13-1)
3. Ammonia (CAS NO. 7664-41-7)
4. Aniline (CAS NO. 62-53-3)
5. Arsenic and Arsenic Compounds (CAS NO. 7440-38-3)
6. Cadmium and Cadmium Compounds (CAS NO. 7440-43-9)
7. Chloroprene (CAS NO. 126-99-8)
8. Chromium and Chromium Compounds (CAS NO. 18540-29-9)
9. Copper and Copper Compounds (CAS NO. 7440-50-8)
10. DEHP (CAS NO. 117-81-7)
11. Ethylene Thiourea (CAS NO. 96-45-7)
12. Hydrogen Fluoride (CAS NO. 7664-39-3)
13. Lead and Lead Compounds (CAS NO. 7439-92-1)
14. Lead Chromate (CAS NO. 7758-97-6)
15. Manganese and Manganese Compounds (CAS NO. 7439-96-5)
16. Nickel and Nickel Compounds (CAS NO. 7440-02-0)
17. Toluene (CAS NO. 108-88-3)
18. Zinc and Zinc Compounds (CAS NO. 7440-66-6)

[RULE 1401, 9-10-2010]

[Devices subject to this condition : D54, D55, D56, D57, D58, D59, D128]

C. Throughput or Operating Parameter Limits

C1.3 The operator shall limit the material processed to no more than 4000 lb(s) in any one day.

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

For the purpose of this condition, material processed shall be defined as total quantity of rubber processed in this equipment.

[RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D128]

C1.11 The operator shall limit the material processed to no more than 12,000 lb(s) in any one day.

For the purpose of this condition, material processed shall be defined as total quantity of rubber processed in devices D54, D55, D56, D57, D58, and D59.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D54, D55, D56, D57, D58, D59]

D. Monitoring/Testing Requirements

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a semi-annual basis, at least, unless the equipment did not operate during the entire semi-annual period. The routine semi-annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or

2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

1). Stack or emission point identification;

2). Description of any corrective actions taken to abate visible emissions;

3). Date and time visible emission was abated; and

4). All visible emission observation records by operator or a certified smoke reader.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : C158, C161]

D323.2 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or

2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

1). Stack or emission point identification;

2). Description of any corrective actions taken to abate visible emissions;

3). Date and time visible emission was abated; and

4). All visible emission observation records by operator or a certified smoke reader.

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : D54, D55, D56, D57, D58, D59, D128, C159, C162]

E. Equipment Operation/Construction Requirements

E57.3 The operator shall vent this equipment to the scrubber system whenever it is in operation.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D54, D55, D56, D57, D58, D59]

E202.1 The operator shall clean and maintain this equipment according to the following specifications:

Clean at least once every 3 months

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C158, C161]

H. Applicable Rules

H23.7 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1155

[RULE 1155, 12-4-2009]

[Devices subject to this condition : C157, C158, C160, C161]

FACILITY PERMIT TO OPERATE
KIRKHILL - TA COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

K. Record Keeping/Reporting

K67.3 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Quarterly cleaning and maintenance

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C158, C161]

K67.4 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Daily flow rate of scrubbing water

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : C157, C160]

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGES 12	PAGE 1
ENGINEERING & COMPLIANCE DIVISION	APPL. NO. See below	DATE 10.15.2012
APPLICATION PROCESSING AND CALCULATIONS	PROCESSED BY E. DELA CRUZ	CHECKED BY D. GORDON

EVALUATION REPORT FOR PERMIT TO OPERATE

COMPANY NAME: KIRKHILL – TA CO.

FACILITY ID: 1744

MAILING ADDRESS: 300 Cypress Street
Brea, CA 92821

EQUIPMENT LOCATION: Same as above

EQUIPMENT DESCRIPTION:

AN 540534:

Title V/RECLAIM Facility Permit Amendment

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2 : RUBBER PRODUCTS MANUFACTURE					
System 5: RUBBER CURING SYSTEM					
OVEN, CURING, ELECTRIC, YOUNG BROTHERS, 90 KVA A/N: 540535	D54	C160		**PM: (9) [RULE 405, 2-7-1986]**	B27.6, C1.11, D323.2, E57.3
OVEN, CURING, NATURAL GAS K. J. CALLAHAN, 0.6 MMBTU/HR A/N: 540536	D55	C160	NOX: PROCESS UNIT**	**CO: 2000 PPMV(5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.1 GRAINS/SCF(5) [RULE 409, 8-7-1981]; PM: (9) [RULE 405, 2-7-1986]**	B27.6, C1.11, D323.2, E57.3
OVEN CURING, ELECTRIC, GRIEVE-HENDRY, 40 KW A/N: 540537	D56	C160		**PM: (9) [RULE 405, 2-7-1986]**	B27.6, C1.11, D323.2, E57.3
OVEN, CURING, NO. 7, NATURAL GAS, MILMETCO, 0.5 MMBTU/HR A/N: 540538	D57	C160	NOX: PROCESS UNIT**	**CO: 2000 PPMV(5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.1 GRAINS/SCF(5) [RULE 409, 8-7-1981]; PM: (9) [RULE 405, 2-7-1986]**	B27.6, C1.11, D323.2, E57.3
OVEN, CURING, NO. 8, NATURAL GAS, CALLAHAN, 0.6 MMBTU/HR A/N: 540539	D58	C160	NOX: PROCESS UNIT**	**CO: 2000 PPMV(5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.1 GRAINS/SCF(5) [RULE 409, 8-7-**	B27.6, C1.11, D323.2, E57.3

				1981]; PM: (9) [RULE 405, 2-7-1986]	
OVEN, CURING, NATURAL GAS, IMMERSOPAK BURNER, 0.33 MMBTU/HR A/N: 540540	D59	C160	NOX: PROCESS UNIT**	**CO: 2000 PPMV(5) [RULE 407, 4-2-1982]; NOX: 130 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.1 GRAINS/SCF(5) [RULE 409, 8-7-1981]; PM: (9) [RULE 405, 2-7-1986]**	B27.6, C1.11, D323.2, E57.3
SCRUBBER, CENTRIFUGAL, AMERICAN AIR FILTER, MODEL TYPE W ROTOCLONE SIZE 20, A/N: 540541	C160	D54 D55 D56 D57 D58 D59 C161		**PM: (9) [RULE 404, 2-7-1986]**	H23.7, K67.4
ELECTROSTATIC PRECIPITATOR, UNITED AIR SPECIALISTS, MODEL PSG-32-2 A/N: 540529	C161	C160 C161		**PM: (9) [RULE 404, 2-7-1986]**	D323.1, E202.1, H23.7, K67.3
FILTERS, HEPA, AMERICAN AIR FILTER, MODEL FILTER LINE FLH, 2'-0" W. X 2'-0" L. X 11.5" D.	C162	C161		**PM: (9) [RULE 404, 2-7-1986]**	D323.2

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emissions limit
(5)(5A)(5B) Denotes command & control emission limit (6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc)
(9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements
** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

B. Material/Fuel Type Limits

B27.6 The operator shall not use materials containing any toxic air contaminants (TACs) identified in the SCAQMD Rule 1401 (except for those compounds listed below), as amended 9/10/2012.

COMPOUND	CAS NO.
1,3 Butadiene	106-99-0
Acrylonitrile	107-13-1
Ammonia	7664-41-7
Aniline	62-53-3
Arsenic and Arsenic Compounds	7440-38-3
Cadmium and Cadmium Compounds	7440-43-9
Chloroprene	126-99-8
Chromium and Chromium Compounds	18540-29-9
Copper and Copper Compounds	7440-50-8
DEHP	117-81-7
Ethylene Thiourea	96-45-7
Hydrogen Flouride	7664-39-3
Lead and Lead Compounds	7439-92-1
Lead Chromate	7758-97-6
Manganese and Manganese Compounds	7439-96-5
Nickel and Nickel Compounds	7440-02-0
Toluene	108-88-3
Zinc and Zinc Compounds	7440-66-6

[RULE 1401, 9-10-2010]

[Devices subject to this condition: D54, D55, D56, D57, D58, D59, D128]

C. Throughput or Operating Parameter Limits

C1.11 The operator shall limit the material processed to no more than 12,000 lb(s) in any one day.

For the purpose of this condition, material processed shall be defined as total quantity of rubber processed in devices D54, D55, D56, D57, D58, and D59.

[**RULE 1303(a)(1)-BACT, 5-10-1996**; RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1303(b)(2)-Offset, 5-10-1996**; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: D54, D55, D56, D57, D58, and D59]

D. Monitoring/Testing Requirements

D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a semi-annual basis, at least, unless the equipment did not operate during the entire semi-annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or

2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report and deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

1). Stack or emission point identification;

2). Description of any corrective actions taken to abate visible emissions;

3). Date and time visible emission was abated; and

4). All visible emission observation records by operator or a certified smoke reader.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: C158]

D323.2 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are

observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or

2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report and deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

1). Stack or emission point identification;

2). Description of any corrective actions taken to abate visible emissions;

3). Date and time visible emission was abated; and

4). All visible emission observation records by operator or a certified smoke reader.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: D128, C159]

E. Equipment Operation/Construction Requirements

E57.3 The operator shall vent this equipment to the scrubber system whenever it is in operation.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: D54, D55, D56, D57, D58, D59]

E202.1 The operator shall clean and maintain this equipment according to the following specifications:

Clean at least once every 3 months

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: C158, C161]

H. Applicable Rules

H23.7 This equipment is subject to the applicable requirements of the following rules or regulations

Contaminant	Rule	Rule/Subpart
PM	District Rule	1155

[RULE 1155, 12-4-2009]

[Devices subject to this condition: C155, C157, C158, C160, C161]

K. Record Keeping/Reporting

K67.3 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Quarterly cleaning and maintenance

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: C158, C161]

K67.4 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Daily flow rate of scrubbing water

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition: C157, C160]

BACKGROUND/PROCESS DESCRIPTION:

Kirkhill - TA Company with facility ID 1744 is a NOx RECLAIM Cycle II and Title V facility. The company was issued its Title V renewal on September 27, 2011.

The company submitted the following applications on July 19, 2012:

1. AN 540534 – this is a Title V amendment application to modify six ovens and install a new air pollution control system consisting of scrubber, electrostatic precipitator, and HEPA filters. Currently, the six ovens are vented to a scrubber, two mist eliminators, and electrostatic precipitator with device ID's C61, C62, C63, and C64. The new air pollution control system will replace devices C61 to C64.
2. AN 540535 – this application is for a modification to an oven with device ID D54 to vent to a new air pollution control system consisting of scrubber electrostatic precipitator and HEPA filters.
3. AN 540536 – this application is for a modification to an oven with device ID D55 to vent to a new air pollution control system consisting of scrubber electrostatic precipitator and HEPA filters.
4. AN 540537 – this application is for a modification to an oven with device ID D56 to vent to a new air pollution control system consisting of scrubber electrostatic precipitator and HEPA filters.
5. AN 540538 – this application is for a modification to an oven with device ID D57 to vent to a new air pollution control system consisting of scrubber electrostatic precipitator and HEPA filters.
6. AN 540539 – this application is for a modification to an oven with device ID D58 to vent to a new air pollution control system consisting of scrubber electrostatic precipitator and HEPA filters.
7. AN 540540 – this application is for a modification to an oven with device ID D59 to vent to a new air pollution control system consisting of scrubber electrostatic precipitator and HEPA filters.
8. AN 540541 – this application is to install a new scrubber which will control emissions from the six ovens above. This new scrubber will replace an existing scrubber with device ID C61.

9. AN 540542 – this application is to install a new electrostatic precipitator (ESP) which will control emissions from the six ovens above. This new ESP will replace an existing ESP with device ID C64.
10. AN 540543 – this application is to install new HEPA filters which will control emissions from the six ovens above.

EMISSION CALCULATIONS:

AN 540535 to 540543:

Operating Data:

Average operation	16 hrs/day	6 days/wk	52 wk/yr
Maximum operation	24 hrs/day	7 days/wk	52 wk/yr
Process rate		500 lb/hr or 12,000 lb/day	
PM_{10} emission factor		1 lb/ton	
ROG emission factor[1]		2.24×10^{-4} lb/lb	
PM_{10} control efficiency		99.9%	

[1]Emission factor taken from AP-42 Chapter 4.12, average of ROG emission factors for Tire Cure

Emissions from six ovens come from the processing of rubber.

PM_{10} emission:

PM_{10} = 12,000 lb/day x 1 lb/ton x ton/2000 lb x day/24 hr

$R_{1,\ hourly}$ = 0.25 lb/hr

$R_{2,\ hourly}$ = 0.25 lb/hr x (1-0.999) = 2.5×10^{-4} lb/hr

$R_{2,\ daily}$ = 2.5×10^{-4} lb/hr x 24 hr/day = 6.0×10^{-3} lb/day

$R_{2,\ yearly}$ = 6.0×10^{-3} lb/day x 7 day/wk x 52 wk/yr = 2.18 lb/yr

30DA = 6.0×10^{-3} lb/day x 30 day/30 day = 6.0×10^{-3} lb/day

ROG emission:

ROG = 12,000 lb/day x 2.24×10^{4} lb/lb x day/24 hr

$R_{1,\ hourly}$ = 0.112 lb/hr

$R_{1,\ daily}$ = 12,000 lb/day x 2.24×10^{-4} lb/lb = 2.69 lb/day

$R_{1,\ yearly}$ = 2.69 lb/day x 7 day/wk x 52 wk/yr = 979 lb/yr

30DA = 2.69 lb/day x 30 day/30 day = 2.69 lb/day

30DA = 2.69 lb/day x (1/6 ovens) = 0.45 lb/day per oven

AN 540536 (from natural gas combustion):

NOx emissions:

R_1 = 0.6 MMBtu/hr x 1 ft^3/1050 Btu x 130 lb/MMCF

$R_{1,\ hourly}$ = 0.074 lb/hr

$R_{1,\ daily}$ = 0.074 lb/hr x 24 hr/day = 1.78 lb/day

$R_{1,\ yearly}$ = 1.78 lb/day x 7 day/wk x 52 wk/yr = 648 lb/year

30DA = 1.78 lb/day x (30 day/30 day) = 1.78 lb/day

CO emissions:

R_1 = 0.6 MMBtu/hr x 1 ft^3/1050 Btu x 35.0 lb/MMCF
$R_{1, hourly}$ = 0.02 lb/hr
$R_{1, daily}$ = 0.02 lb/hr x 24 hr/day = 0.48 lb/day
$R_{1, yearly}$ = 0.48 lb/day x 7 day/wk x 52 wk/yr = 175 lb/year
30DA = 0.48 lb/day x (30 day/30 day) = 0.48 lb/day

ROG emissions:

R_1 = 0.6 MMBtu/hr x 1 ft^3/1050 Btu x 7.00 lb/MMCF
$R_{1, hourly}$ = 0.004 lb/hr
$R_{1, daily}$ = 0.004 lb/hr x 24 hr/day = 0.096 lb/day
$R_{1, yearly}$ = 0.096 lb/day x 7 day/wk x 52 wk/yr = 34.9 lb/year
30DA = 0.096 lb/day x (30 day/30 day) = 0.096 lb/day

SOx emissions:

R_1 = 0.6 MMBtu/hr x 1 ft^3/1050 Btu x 0.60 lb/MMCF
$R_{1, hourly}$ = 0.0003 lb/hr
$R_{1, daily}$ = 0.0003 lb/hr x 24 hr/day = 0.007 lb/day
$R_{1, yearly}$ = 0.007 lb/day x 7 day/wk x 52 wk/yr = 2.5 lb/year
30DA = 0.007 lb/day x (30 day/30 day) = 0.007 lb/day

PM_{10} emissions:

R_1 = 0.6 MMBtu/hr x 1 ft^3/1050 Btu x 7.50 lb/MMCF
$R_{1, hourly}$ = 0.004 lb/hr
$R_{1, daily}$ = 0.004 lb/hr x 24 hr/day = 0.096 lb/day
$R_{1, yearly}$ = 0.096 lb/day x 7 day/wk x 52 wk/yr = 34.9 lb/year
30DA = 0.096 lb/day x (30 day/30 day) = 0.096 lb/day

AN 540538 (from natural gas combustion):

NOx emissions:

R_1 = 0.5 MMBtu/hr x 1 ft^3/1050 Btu x 130 lb/MMCF
$R_{1, hourly}$ = 0.062 lb/hr
$R_{1, daily}$ = 0.062 lb/hr x 24 hr/day = 1.49 lb/day
$R_{1, yearly}$ = 1.49 lb/day x 7 day/wk x 52 wk/yr = 542 lb/year
30DA = 1.49 lb/day x (30 day/30 day) = 1.49 lb/day

CO emissions:

R_1 = 0.5 MMBtu/hr x 1 ft^3/1050 Btu x 35.0 lb/MMCF
$R_{1, hourly}$ = 0.017 lb/hr
$R_{1, daily}$ = 0.017 lb/hr x 24 hr/day = 0.41 lb/day
$R_{1, yearly}$ = 0.41 lb/day x 7 day/wk x 52 wk/yr = 149 lb/year
30DA = 0.41 lb/day x (30 day/30 day) = 0.41 lb/day

ROG emissions:

R_1 = 0.5 MMBtu/hr x 1 ft^3/1050 Btu x 7.00 lb/MMCF
$R_{1, hourly}$ = 0.004 lb/hr
$R_{1, daily}$ = 0.004 lb/hr x 24 hr/day = 0.096 lb/day
$R_{1, yearly}$ = 0.096 lb/day x 7 day/wk x 52 wk/yr = 34.9 lb/year
30DA = 0.096 lb/day x (30 day/30 day) = 0.096 lb/day

SOx emissions:

R_1 = 0.5 MMBtu/hr x 1 ft^3/1050 Btu x 0.60 lb/MMCF
$R_{1, hourly}$ = 0.0003 lb/hr
$R_{1, daily}$ = 0.0003 lb/hr x 24 hr/day = 0.007 lb/day
$R_{1, yearly}$ = 0.007 lb/day x 7 day/wk x 52 wk/yr = 2.5 lb/year
30DA = 0.007 lb/day x (30 day/30 day) = 0.007 lb/day

PM_{10} emissions:

R_1 = 0.5 MMBtu/hr x 1 ft^3/1050 Btu x 7.50 lb/MMCF
$R_{1, hourly}$ = 0.004 lb/hr
$R_{1, daily}$ = 0.004 lb/hr x 24 hr/day = 0.096 lb/day
$R_{1, yearly}$ = 0.096 lb/day x 7 day/wk x 52 wk/yr = 34.9 lb/year
30DA = 0.096 lb/day x (30 day/30 day) = 0.096 lb/day

AN 540540 (from natural gas combustion):
NOx emissions:

R_1 = 0.33 MMBtu/hr x 1 ft^3/1050 Btu x 130 lb/MMCF
$R_{1, hourly}$ = 0.041 lb/hr
$R_{1, daily}$ = 0.041 lb/hr x 24 hr/day = 0.98 lb/day
$R_{1, yearly}$ = 0.98 lb/day x 7 day/wk x 52 wk/yr = 357 lb/year
30DA = 0.98 lb/day x (30 day/30 day) = 0.98 lb/day

CO emissions:

R_1 = 0.33 MMBtu/hr x 1 ft^3/1050 Btu x 35.0 lb/MMCF
$R_{1, hourly}$ = 0.011 lb/hr
$R_{1, daily}$ = 0.011 lb/hr x 24 hr/day = 0.26 lb/day
$R_{1, yearly}$ = 0.26 lb/day x 7 day/wk x 52 wk/yr = 94.6 lb/year
30DA = 0.26 lb/day x (30 day/30 day) = 0.26 lb/day

ROG emissions:

R_1 = 0.33 MMBtu/hr x 1 ft^3/1050 Btu x 7.00 lb/MMCF
$R_{1, hourly}$ = 0.0022 lb/hr
$R_{1, daily}$ = 0.0022 lb/hr x 24 hr/day = 0.05 lb/day
$R_{1, yearly}$ = 0.05 lb/day x 7 day/wk x 52 wk/yr = 18.2 lb/year
30DA = 0.05 lb/day x (30 day/30 day) = 0.05 lb/day

SOx emissions:

R_1 = 0.33 MMBtu/hr x 1 ft^3/1050 Btu x 0.60 lb/MMCF
$R_{1,\ hourly}$ = 0.0002 lb/hr
$R_{1,\ daily}$ = 0.0002 lb/hr x 24 hr/day = 0.005 lb/day
$R_{1,\ yearly}$ = 0.005 lb/day x 7 day/wk x 52 wk/yr = 1.8 lb/year
30DA = 0.005 lb/day x (30 day/30 day) = 0.005 lb/day

PM_{10} emissions:

R_1 = 0.33 MMBtu/hr x 1 ft^3/1050 Btu x 7.50 lb/MMCF
$R_{1,\ hourly}$ = 0.002 lb/hr
$R_{1,\ daily}$ = 0.002 lb/hr x 24 hr/day = 0.048 lb/day
$R_{1,\ yearly}$ = 0.048 lb/day x 7 day/wk x 52 wk/yr = 17.5 lb/year
30DA = 0.048 lb/day x (30 day/30 day) = 0.048 lb/day

Summary of Emissions:

AN 540535, 540537, & 540539:

Pollutant	Hourly Max. Emissions lb/hr	Daily Max. Emissions lb/day	Annual Max. Emissions lb/yr	30 Day Average Emissions lb/day
PM_{10}	4.17×10^{-5}	1.0×10^{-3}	0.36	1.0×10^{-3}
ROG	0.02	0.45	163	0.45

AN 540536:

Pollutant	Hourly Max. Emissions lb/hr	Daily Max. Emissions lb/day	Annual Max. Emissions lb/yr	30 Day Average Emissions lb/day
CO	0.02	0.48	175	0.48
NOx	0.07	1.78	648	1.78
PM_{10}	4.0×10^{-3}	0.097	35.3	0.097
ROG	0.02	0.55	198	0.55
SOx	3.0×10^{-4}	7.0×10^{-3}	2.5	7.0×10^{-3}

AN 540538:

Pollutant	Hourly Max. Emissions lb/hr	Daily Max. Emissions lb/day	Annual Max. Emissions lb/yr	30 Day Average Emissions lb/day
CO	0.02	0.41	149	0.41
NOx	0.06	1.49	542	1.49
PM_{10}	4.0×10^{-3}	0.097	35.3	0.097
ROG	0.02	0.55	198	0.55
SOx	3.0×10^{-4}	7.0×10^{-3}	2.5	7.0×10^{-3}

AN 540540:

Pollutant	Hourly Max. Emissions lb/hr	Daily Max. Emissions lb/day	Annual Max. Emissions lb/yr	30 Day Average Emissions lb/day
CO	0.011	0.26	94.6	0.26
NOx	0.04	0.98	357	0.98
PM_{10}	2.0×10^{-3}	0.049	17.9	0.049
ROG	0.02	0.5	181.2	0.5
SOx	2.0×10^{-4}	5.0×10^{-3}	1.8	5.0×10^{-3}

TAC emissions from all six ovens:

Pollutant	Emission factor (lb/lb)	Control efficiency	Emission (lb/hr)
1,3 butadiene	1.24×10^{-6}	0	6.2×10^{-4}
Acrylonitrile	5.25×10^{-6}	0	2.63×10^{-3}
Ammonia	0.07335%	0	3.67×10^{-1}
Analine	8.85×10^{-7}	0	4.43×10^{-4}
Arsenic	1×10^{-12}	99.9	5.0×10^{-13}
Cadmium	1.5×10^{-8}	99.9	7.5×10^{-9}
Chloroprene	5.25×10^{-6}	0	2.63×10^{-3}
Chromium	3.0×10^{-7}	99.9	1.5×10^{-7}
Copper	7.1×10^{-12}	99.9	3.55×10^{-12}
DEHP	1.05×10^{-6}	0	5.25×10^{-4}
Ethylene Thiourea	5.25×10^{-6}	0	2.63×10^{-3}
Hydrogen Fluoride	7.6×10^{-8}	99.9	3.8×10^{-8}
Lead Chromate	5.7×10^{-6}	99.9	2.85×10^{-6}
Lead Compounds	1.12×10^{-9}	99.9	5.6×10^{-10}
Manganese & Manganese Compounds	2.0×10^{-8}	99.9	1.0×10^{-8}
Nickel	6.1×10^{-12}	99.9	3.05×10^{-12}
Toluene	5.25×10^{-6}	0	2.63×10^{-3}
Zinc & Zinc Compounds	2.99×10^{-4}	99.9	1.5×10^{-5}

AN 5405541, 540542, 540543:

There are no emissions from these air pollution control devices.

RULES EVALUATION:

Rule 212: **Standards for Approving Permits** – This facility is located within 1,000 feet of Brea Junior High School, however, there is no increase in emissions because the process rate did not increase. Therefore, this project is not subject to the public notification requirements of section (c)(1).

This project will not result in any emission increase and therefore, not subject to the public notification requirements of section (g). The emissions from this project tank do not exceed the Rule 212(g) limits as shown below:

POLLUTANT	MAX. EMISSIONS (LBS/DAY)	RULE 212(g) THRESHOLD (LBS/DAY)
CO	0	220
NOx	0	40
PM_{10}	0	30
VOC	0	30
SOx	0	60

This project does not cause any increase maximum individual cancer risk (MICR) greater than, or equal to one in a million because there is no change in throughput process. This project is not subject to the public notification requirements of section (c)(3).

Rule 401: **Visible Emissions** – No visible emissions is expected if the equipment is well maintained and properly operated. Therefore, compliance with this rule is expected.

Rule 402: **Public Nuisance** – Operation of this equipment is not expected to create any nuisance problem. Compliance with this rule is expected.

Rule 404: **Particulate Matter – Concentration** – Particulate matter emission is expected to be negligible during operation. Emissions will be less than the standard set forth in Table 404(a); therefore, compliance with this rule is expected.

Rule 405: **Solid Particulate Matter – Weight** – Compliance with this rule is expected since the highest calculated PM emission is 0.01 lb/hr, which is lower than the lowest allowable limit for solid particulate matter (Table 405(a) – 0.99 lb/hr).

Rule 1155: **Particulate Matter (PM) Control Devices** – This rule establishes requirements for particulate matter air pollution control devices. Scrubber and ESP will have a condition to comply with this rule. HEPA filter is exempt from this rule except for subparagraph (d)(1) pursuant to subparagraph (g)(13). Compliance with this rule is expected.

Reg. XIII: **New Source Review – (BACT)** – The ovens will be vented to air pollution control system consisting of scrubber, electrostatic precipitator, and HEPA filter. There is no increase in process throughput; hence there is no increase in emissions. Therefore, compliance with this rule is expected.

Modeling – NOx, CO and PM emissions are below allowable emissions, therefore no further screening analysis is required.

POLLUTANT	ALLOWABLE EMISSIONS (LBS/HR)	CALCULATED EMISSIONS (LBS/HR)
NOx	0.068	NA
CO	3.7	NA
PM_{10}	0.41	0

Offsets – Offsets are not required since emissions did not change from current operation. Therefore, compliance with this rule is expected.

PTE

Criteria Pollutants	Current emissions (lb/day)	Change in emissions (lb/day)	New PTE (lb/day)
NOx	36	0	36
ROG	10	0	10
SOx	0	0	0
PM_{10}	5.24	0	5.24
CO	22	0	22

Emission Calculations – This project will not change any emissions because throughput did not change. The replacement of air pollution control devices will not alter any emissions since ovens are currently vented to a scrubber with electrostatic precipitator and mist eliminator.

Rule 1401: **New Source Review of Toxic Air Contaminants** – A risk assessment is not required for these applications since there is no change in process. Therefore, compliance with this rule is expected.

CONCLUSIONS & RECOMMENDATIONS:

I recommend issuing Permits to Construct for applications 540535 to 540543.