



September 8, 2021  
Mr. Richard Bland  
Pactiv LLC  
2024 Norris Road  
Bakersfield, CA 93308

**Re: Revised Proposed ATC / Certificate of Conformity (Significant Mod)**  
**Facility Number: S-892**  
**Project Number: S-1210500**

Dear Mr. Bland:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. Pactiv proposes to revise the maximum sulfur content of the PUC regulated natural gas combusted to 1.0 gr S/100 scf and discontinue sampling fuel gas for sulfur content.

This proposal was initially submitted on June 22, 2021. However, it was not posted for the public to review. Accordingly, this proposal is being resubmitted to account for public review as outlined below:

The notice of preliminary decision for this project has been posted on the District's website ([www.valleyair.org](http://www.valleyair.org)). After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authority to Construct with a Certificate of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

**Samir Sheikh**  
Executive Director/Air Pollution Control Officer

---

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: (661) 392-5500 FAX: (661) 392-5585

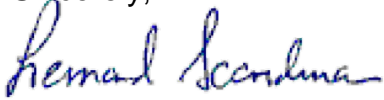
September 8, 2021

Mr. Richard Bland

Page 2

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in blue ink that reads "Brian Clements". The signature is written in a cursive style with a large initial 'B'.

Brian Clements  
Director of Permit Services

Enclosures

cc: Courtney Graham, CARB (w/enclosure) via email

cc: Laura Yannayon, EPA (w/enclosure) via EPS

# San Joaquin Valley Air Pollution Control District

## Authority to Construct Application Review

### Thermoplastic Resin Reclaim Operation

Facility Name:	Pactiv, LLC	Date:	Aug 17, 2021
Mailing Address:	2024 Norris Road Bakersfield, CA 93308	Engineer:	Stephen Leonard
Contact Person:	Richard Bland	Lead Engineer:	Steve Davidson <i>Steven Davidson</i>
Telephone:	661-392-4086		
E-Mail:	rbland@pactiv.com		
Application #(s):	S-892-4-33		
Project #:	S-1210500		
Deemed Complete:	3/11/2021		

---

#### I. Proposal

Pactiv Corporation (Pactiv) operates a polystyrene foam manufacturing and processing facility in Bakersfield under the federally enforceable Title V Permit to Operate (PTO), S-892. The facility produces food grade foam products from polystyrene foam sheet. The processes at the facility include: raw material storage and transfer, blowing agent storage, extrusion, thermoforming, recycling/reclaiming, and an emergency firewater pump.

Pactiv has submitted an Authority to Construct (ATC) application to revise the listed maximum sulfur content of the PUC regulated natural gas combusted in the facility's regenerative thermal oxidizer listed on their Polystyrene Fluff Reclaim Operation permit S-892-4 to 1.0 gr S/100 scf. This action is in line with District Policy APR 1720, "Generally Accepted SOx Emission Factor for Combustion of PUC-quality Natural Gas". Pursuant to District Policy APR 1720 sampling of the sulfur content of purchased PUC regulated natural gas is not required.

There is no proposed increase in the daily or annual fuel use at the thermal oxidizer, nor any change in the materials received or processed. The revision of the generally accepted emission factor for sulfur content of PUC regulated natural gas does not constitute an "NSR Modification", pursuant to Rule 2201, Section 3.25.

Pactiv is a Title V facility that received its Title V Permit to Operate on July 15, 1998. This modification is classified as a Title V significant modification pursuant to Rule 2520, Section 3.20 and 3.29, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authorities to Construct. Pactiv must apply to administratively amend their Title V Operating Permit to include the requirements of the ATC(s) issued with this project.

## II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (8/15/19)
Rule 2520	Federally Mandated Operating Permits (8/15/19)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4682	Polystyrene, Polyethylene, and Polypropylene Products Manufacturing (12/15/11)
Rule 4801	Sulfur Compounds (12/17/92)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)  
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

## III. Project Location

The facility is located at 2024 Norris Rd in Bakersfield, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

## IV. Process Description

Permit unit S-892-4 is the polystyrene fluff and scrap material reclaim operation where trim scrap coming off the thermoformers, startup scrap, and off spec material sheets are run through grinders and granulators to reduce the size and allow pneumatic transfer of ground scrap to reclaim storage silos which are vented to the regenerative thermal oxidizer (RTO). The RTO is fired exclusively on PUC regulated natural gas. Ground scrap and fluff foam is processed through reclaim extruders which melts scrap polystyrene and sheet fluff, then extrudes strands of plastic which are cut by an underwater high speed rotating knife to form pellets, which are then transported to reclaim storage bins. Pactiv claims 100% capture via Method 204 determinations from the reclaim extruders and storage bins with any released blowing agent vented directly to the RTO. The currently permitted natural gas sulfur content of 0.25 gr S/100 scf was the generally accepted emission factor when the thermal oxidizer was installed in 1987 under the Kern County Air Pollution Control District (KCAPCD). This factor is being revised to the current generally accepted emission factor of 1.0 gr S/100 scf. This current factor is based on guidance from Pacific Gas and Electric transportation agreements and the California Air Resources Board, as described in District Policy APR 1720. The District has never required testing for sulfur content in PUC regulated natural gas supplies.

## V. Equipment Listing

### Pre-Project Equipment Description:

S-892-4-32: THERMOPLASTIC RESIN FLUFF RECLAIM OPERATION INCLUDING 17 TRIM GRINDERS, SIX RECLAIM GRANULATORS, FLUFF TRANSFER AND STORAGE IN 11 FLUFF STORAGE SILOS, FOUR RECLAIM EXTRUDER LINES, VOC VAPOR COLLECTION SYSTEM, AND SMITH ENGINEERING REGENERATIVE THERMAL OXIDIZER (RTO)

### Proposed Modification:

Revise PUC regulated natural gas sulfur content and remove reference to sulfur content sampling.

S-892-4-33: MODIFICATION OF THERMOPLASTIC RESIN FLUFF RECLAIM OPERATION INCLUDING 17 TRIM GRINDERS, SIX RECLAIM GRANULATORS, FLUFF TRANSFER AND STORAGE IN 11 FLUFF STORAGE SILOS, FOUR RECLAIM EXTRUDER LINES, VOC VAPOR COLLECTION SYSTEM, AND SMITH ENGINEERING REGENERATIVE THERMAL OXIDIZER (RTO): REVISE SULFUR LIMIT OF PUC REGULATED NATURAL GAS COMBUSTED IN THERMAL OXIDIZER TO 1.0 GR/100 SCF AND DISCONTINUE SAMPLING FUEL GAS FOR SULFUR CONTENT

### Post-Project Equipment Description:

S-892-4-33: THERMOPLASTIC RESIN FLUFF RECLAIM OPERATION INCLUDING 17 TRIM GRINDERS, SIX RECLAIM GRANULATORS, FLUFF TRANSFER AND STORAGE IN 11 FLUFF STORAGE SILOS, FOUR RECLAIM EXTRUDER LINES, VOC VAPOR COLLECTION SYSTEM, AND SMITH ENGINEERING REGENERATIVE THERMAL OXIDIZER (RTO)

## VI. Emission Control Technology Evaluation

These administrative modifications do not qualify as a Rule 2201 modification; therefore, a review of emission control technology is not required.

## VII. General Calculations

These administrative modifications do not qualify as a Rule 2201 modification; therefore, calculations for SSPE, SSIPE, SB 288 major modification, Federal Major Modification, offsets, and public notice are not required. The potential to emit of SO<sub>x</sub> (as SO<sub>2</sub>) is recalculated as pre-project PE1 as follows:

1 gr S/100 dscf (as H<sub>2</sub>S) =15.9 ppmv S

If thermal oxidizer has a heat input rate of 16 MMBtu/hr and the natural gas heating value is estimated at 1000 Btu/ft<sup>3</sup>,

Then; SO<sub>x</sub> emission rate = 1.03 lb-SO<sub>x</sub>/day & 375.8 lb-SO<sub>x</sub>/year

PE2 = PE1 = 1.0 lb-SO<sub>x</sub>/day & 376 lb-SO<sub>x</sub>/yr

See **Appendix E** for SO<sub>x</sub> calculation spreadsheets.

Conditions 12 and 29 on the existing Permit Unit Requirements for S-892-4-32 shall be revised as follows:

- 12. Fuel gas sulfur content shall not exceed 1.0 grain per 100 scf. [District Rule 2201]
- 29. District witnessed source testing to demonstrate compliance with VOC limit and RTO control efficiency shall be conducted by independent testing laboratory annually 60 days prior to permit anniversary date. [District Rules 1081 and 2201]

## **VIII. Compliance Determination**

### **Rule 2201 New and Modified Stationary Source Review Rule**

These administrative modifications do not qualify as a Rule 2201 modification; therefore, this rule does not apply and no further discussion is required.

### **Rule 2520 Federally Mandated Operating Permits**

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification qualifies as a Significant Modification to the Title V Permit.

In accordance with Rule 2520, Minor Permit Modifications are permit modifications that:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

- a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
  6. Do not seek to consolidate overlapping applicable requirements;
  7. Do not grant or modify a permit shield.

Significant Permit Modification is defined as “permit amendments that do not qualify as minor permit modifications or as administrative amendments.” Since this project is removing a sulfur content monitoring requirement, it is considered a Significant Permit Modification to the Title V operating permit.

Additionally, Section 11.4 requires a description of the proposed change, the emissions resulting from the change, any new applicable requirements that will apply if the change occurs, suggested draft permits, compliance certification and an EPA 45-day review period of the proposed permit modification (or a shorter period if EPA has notified the District that EPA will not object to issuance of the permit modification, whichever is first).

As discussed above, the facility has applied for a Certificate of Conformity (COC) and the District will forward to EPA, for a 45-day review period, this application review which includes the proposed modified Title V permit [i.e. proposed ATC(s)] and the compliance certification form which demonstrates compliance with the minor permit modification requirements in Section 11.4. Therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment application.

#### **Rule 4001 New Source Performance Standards (NSPS)**

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. However, no subparts of 40 CFR Part 60 apply to polypropylene and polyethylene resin unloading, storage, transfer operations and scrap grinding operations.

#### **Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63. However, no subparts of 40 CFR Part 61 or 40 CFR Part 63 apply to polypropylene and polyethylene resin unloading, storage, transfer operations and scrap grinding operations.

#### **Rule 4101 Visible Emissions**

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). As the thermal oxidizer is fired solely on natural gas, visible emissions are not expected to exceed Ringelmann 1 or 20% opacity. Also, based on past inspections of the facility continued compliance is expected.

### **Rule 4102 Nuisance**

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

### **California Health & Safety Code 41700 (Health Risk Assessment)**

As discussed above, there are no increases in emissions associated with this project, therefore a health risk assessment is not necessary and no further risk analysis is required.

### **Rule 4201 Particulate Matter Concentration**

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

There is no proposed or expected increase in fuel use or throughput. Therefore, continued compliance is expected.

### **Rule 4682 Polystyrene, Polyethylene, and Polypropylene Products Manufacturing**

This rule is applicable to any polystyrene foam, polyethylene, and polypropylene manufacturing and processing operations. This rule sets forth limits of emissions of VOC, trichlorofluoromethane (CFC-11), and dichlorofluoromethane (CFC-12) from manufacturing and processing of polystyrene foam, polyethylene, and polypropylene and from the storage of VOC blowing agents.

The modification in this project has no impact on the operation or emissions from the facility. Continued compliance is expected.

### **Rule 4801 Sulfur Compounds**

The purpose of this rule is to limit the emissions of sulfur compounds. Exceedance of this limit is not expected for natural gas fired equipment. Therefore, continued compliance with this rule is expected.

### **California Health & Safety Code 42301.6 (School Notice)**

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.



## **California Environmental Quality Act (CEQA)**

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

### **Greenhouse Gas (GHG) Significance Determination**

#### District is a Lead Agency and Project not Covered Under Cap-and-Trade

It is determined that no other agency has or will prepare an environmental review document for the project. Thus, the District is the Lead Agency for this project.

The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

### **District CEQA Findings**

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that for each emissions unit affected by the project the potential project emission increase is equal to or less than 2 lbs per day per pollutant. Therefore, the potential project emission increase is considerably below all annual criteria emissions CEQA significant thresholds. The activity will occur at an existing facility and involves negligible expansion of the existing or former use. Furthermore, the District determined that the activity will not have a significant effect on the environment. Therefore, the District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15301 (Existing Facilities), and finds that the project is exempt per the common sense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

### Indemnification Agreement/Letter of Credit Determination

According to District Policy APR 2010 (CEQA Implementation Policy), when the District is the Lead or Responsible Agency for CEQA purposes, an indemnification agreement and/or a letter of credit may be required. The decision to require an indemnity agreement and/or a letter of credit is based on a case-by-case analysis of a particular project’s potential for litigation risk, which in turn may be based on a project’s potential to generate public concern, its potential for significant impacts, and the project proponent’s ability to pay for the costs of litigation without a letter of credit, among other factors.

The criteria pollutant emissions and toxic air contaminant emissions associated with the proposed project are not significant, and there is minimal potential for public concern for this particular type of facility/operation. Therefore, an Indemnification Agreement and/or a Letter of Credit will not be required for this project in the absence of expressed public concern.

### IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful EPA review period, issue ATC S-892-4-33 subject to the permit conditions on the attached draft ATC in **Appendix A**.

### X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-892-4-33	3020-2-H	16.0 MMBtu/hr	\$1,238

### Appendixes

- A: Draft ATC
- B: Current PTO
- C: Emission Profile
- D: Compliance Certification
- E: SO<sub>x</sub> Emissions Calculation Spreadsheets

**APPENDIX A**  
**Draft ATC**

*San Joaquin Valley  
Air Pollution Control District*

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** S-892-4-33

**LEGAL OWNER OR OPERATOR:** PACTIV LLC  
**MAILING ADDRESS:** 2024 NORRIS RD  
BAKERSFIELD, CA 93308-2297

**LOCATION:** 2024 NORRIS RD  
BAKERSFIELD, CA 93308-2297

**SECTION:** NE10 **TOWNSHIP:** 29S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF THERMOPLASTIC RESIN FLUFF RECLAIM OPERATION INCLUDING 17 TRIM GRINDERS, SIX RECLAIM GRANULATORS, FLUFF TRANSFER AND STORAGE IN 11 FLUFF STORAGE SILOS, FOUR RECLAIM EXTRUDER LINES, VOC VAPOR COLLECTION SYSTEM, AND SMITH ENGINEERING REGENERATIVE THERMAL OXIDIZER (RTO): REVISE SULFUR LIMIT OF PUC REGULATED NATURAL GAS COMBUSTED IN THERMAL OXIDIZER TO 1.0 GR/100 SCF AND DISCONTINUE SAMPLING FUEL GAS FOR SULFUR CONTENT

## CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Only thermoplastic resins approved by the APCO shall be used. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Storage silos shall be maintained gas tight. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Trim grinders units and reclaim granulator units shall be vented only to the fluff feed silos with fabric collectors. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Operation shall be equipped with no more than 11 fluff storage silos each with separate fabric collectors, 6 of which have live bottom bins, and all venting to the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.** This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Samir Sheikh, Executive Director / APCO

**Brian Clements, Director of Permit Services**

S-892-4-33 : Jun 17 2021 1:26PM -- LEONARDS : Joint Inspection NOT Required

7. The VOC vapor collection system shall serve 4 fluff feed silo fabric collector exhausts, 4 extruder vents including vapor mix box #MB-2 and vapor booster fan exhausting to mix box #MB-1. [District Rules 2201 and 4682] Federally Enforceable Through Title V Permit
8. Operation shall include no more than 4 reclaim extruder lines with underwater pelletizer systems, air dryers, 4 pelletizer blowers, and one reclaim extruder line with a waterslide pelletizer and blower. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Operation shall include VOC vapor collection system exhausting to RTO serving 11 fluff storage silos including mix box #MB-1. [District Rule 2201] Federally Enforceable Through Title V Permit
10. RTO shall be equipped with 3 heat exchanger beds filled with ceramic media, combustion chamber, two 8 MMBtu/hr burners, combustion air fan and induced draft exhaust fan. [District Rules 2201 and 4682] Federally Enforceable Through Title V Permit
11. RTO beds smokeless burnout system shall include burnout fan and ducting from outlet side of heat exchanger beds to combustion chamber. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Fluff transfer and reclaim resin storage operation shall not operate or produce VOC emissions during RTO burnout process. [District Rule 2201] Federally Enforceable Through Title V Permit
13. RTO burners shall be fired exclusively with PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Fuel gas sulfur content shall not exceed 1.0 grain per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Fuel gas flowrate to RTO burners shall not exceed 384,000 scf per day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. RTO combustion chamber temperature shall be maintained at no less than 1350 deg. F. [District Rule 4682 and 40 CFR 64] Federally Enforceable Through Title V Permit
17. The RTO shall be equipped with a continuous temperature monitoring and recording device. During operation, the temperature shall be recorded at least once every fifteen minutes. [40 CFR 64]
18. The blowing agent vapor residence time in RTO firebox shall be maintained at no less than 1.0 second. [District Rule 4682] Federally Enforceable Through Title V Permit
19. The blowing agent vapor collection and incineration efficiency shall be maintained at no less than 95% by weight. [District Rule 4682] Federally Enforceable Through Title V Permit
20. Ambient air flow into vapor control system shall be regulated at mix boxes and shall not exceed amount required to maintain vapor concentration below lower explosive limit (LEL). [District Rules 2201 and 4682] Federally Enforceable Through Title V Permit
21. Permittee shall maintain accurate records of vapor control system operation conditions (RTO operating temperature, fuel gas flowrate, etc.). [District Rule 4682] Federally Enforceable Through Title V Permit
22. Records required by conditions on this permit shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Particulate matter (PM10) emission rate at RTO exhaust shall not exceed 14.6 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Maximum emission rate of SOx (as SO2) shall not exceed 0.2 pound per day. [District Rule 2201] Federally Enforceable Through Title V Permit
25. Maximum emission rate of volatile organic compounds (VOC) shall not exceed 184.6 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
26. Maximum emission rate of oxides of nitrogen (NOx) shall not exceed 53.8 pounds per day (as NO2). [District Rule 2201] Federally Enforceable Through Title V Permit

DRAFT

CONDITIONS CONTINUE ON NEXT PAGE

27. Maximum emission rate of carbon monoxide (CO) shall not exceed 13.4 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
28. The lifetime emissions from total material input (TMI) shall not exceed 2.4 lb-VOC/100 lb-TMI (calculated on a monthly average). [District Rule 4682] Federally Enforceable Through Title V Permit
29. Lifetime emissions of VOC (LE) from total material input (TMI) shall be calculated on a monthly basis using the following equation:  $LE \text{ (lb-VOC/100 lb TMI)} = 100 \times [BAI - (RECOLL * EFF)] / TMI$  where BAI = pounds VOC blowing agent used/month, RECOLL = pounds blowing agent captured/month from reclaim operations, EFF = control efficiency of thermal oxidizer, and TMI is the total material (including virgin and recycled polystyrene, nucleator, colorant and any other solid additives, and all the blowing agents) processed/month. [District Rule 4682] Federally Enforceable Through Title V Permit
30. Quantity of VOCs from the extruders, captured from reclaim operations, RECOLL, shall be calculated on a monthly basis using the following equation:  $RECOLL = (SCRAPBA - RPPBA)$  where SCRAPBA = pounds of thermoformer and extruder scrap VOCs entering the reclaim operations per month from the extruders and RPPBA is the pounds/month RPP VOCs (VOCs in reclaimed polystyrene pellets) made from thermoformer and extruder scrap from the extruders. [District Rule 4682] Federally Enforceable Through Title V Permit
31. District witnessed source testing to demonstrate compliance with VOC limit and RTO control efficiency shall be conducted by independent testing laboratory annually 60 days prior to permit anniversary date. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
32. Source testing to demonstrate compliance with District Rule 4682 shall be performed using EPA Methods 25 and 25A for gaseous organics at inlet/outlet of RTO. [District Rule 4682] Federally Enforceable Through Title V Permit
33. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4682. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
34. RTO outlet shall be inspected weekly while in operation for visible emissions. If excessive visible emissions are observed, appropriate action shall be taken. [District Rule 2520] Federally Enforceable Through Title V Permit
35. Records of control system maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520] Federally Enforceable Through Title V Permit
36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 4201, section 3.0 (12/17/92) and 4682, sections 5.1 and 5.2 (6/16/94). [District Rule 2520] Federally Enforceable Through Title V Permit

DRAFT

**APPENDIX B**  
**Current PTO**

# *San Joaquin Valley*

## *Air Pollution Control District*

**PERMIT UNIT:** S-892-4-32

**EXPIRATION DATE:** 01/31/2022

**SECTION:** NE10 **TOWNSHIP:** 29S **RANGE:** 27E

**EQUIPMENT DESCRIPTION:**

THERMOPLASTIC RESIN FLUFF RECLAIM OPERATION INCLUDING 17 TRIM GRINDERS, SIX RECLAIM GRANULATORS, FLUFF TRANSFER AND STORAGE IN 11 FLUFF STORAGE SILOS, FOUR RECLAIM EXTRUDER LINES, VOC VAPOR COLLECTION SYSTEM, AND SMITH ENGINEERING REGENERATIVE THERMAL OXIDIZER (RTO)

### **PERMIT UNIT REQUIREMENTS**

---

1. Only thermoplastic resins approved by the APCO shall be used. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Storage silos shall be maintained gas tight. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Trim grinders units and reclaim granulator units shall be vented only to the fluff feed silos with fabric collectors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. Operation shall be equipped with no more than 11 fluff storage silos each with separate fabric collectors, 6 of which have live bottom bins, and all venting to the RTO. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The VOC vapor collection system shall serve 4 fluff feed silo fabric collector exhausts, 4 extruder vents including vapor mix box #MB-2 and vapor booster fan exhausting to mix box #MB-1. [District Rules 2201 and 4682] Federally Enforceable Through Title V Permit
6. Operation shall include no more than 4 reclaim extruder lines with underwater pelletizer systems, air dryers, 4 pelletizer blowers, and one reclaim extruder line with a waterslide pelletizer and blower. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Operation shall include VOC vapor collection system exhausting to RTO serving 11 fluff storage silos including mix box #MB-1. [District Rule 2201] Federally Enforceable Through Title V Permit
8. RTO shall be equipped with 3 heat exchanger beds filled with ceramic media, combustion chamber, two 8 MMBtu/hr burners, combustion air fan and induced draft exhaust fan. [District Rules 2201 and 4682] Federally Enforceable Through Title V Permit
9. RTO beds smokeless burnout system shall include burnout fan and ducting from outlet side of heat exchanger beds to combustion chamber. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Fluff transfer and reclaim resin storage operation shall not operate or produce VOC emissions during RTO burnout process. [District Rule 2201] Federally Enforceable Through Title V Permit
11. RTO burners shall be fired exclusively with PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Fuel gas sulfur content shall not exceed 0.25 grain per 100 scf. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Fuel gas flowrate to RTO burners shall not exceed 384,000 scf per day. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.



14. RTO combustion chamber temperature shall be maintained at no less than 1350 deg. F. [District Rule 4682 and 40 CFR 64] Federally Enforceable Through Title V Permit
15. The RTO shall be equipped with a continuous temperature monitoring and recording device. During operation, the temperature shall be recorded at least once every fifteen minutes. [40 CFR 64]
16. The blowing agent vapor residence time in RTO firebox shall be maintained at no less than 1.0 second. [District Rule 4682] Federally Enforceable Through Title V Permit
17. The blowing agent vapor collection and incineration efficiency shall be maintained at no less than 95% by weight. [District Rule 4682] Federally Enforceable Through Title V Permit
18. Ambient air flow into vapor control system shall be regulated at mix boxes and shall not exceed amount required to maintain vapor concentration below lower explosive limit (LEL). [District Rules 2201 and 4682] Federally Enforceable Through Title V Permit
19. Permittee shall maintain accurate records of vapor control system operation conditions (RTO operating temperature, fuel gas flowrate, etc.). [District Rule 4682] Federally Enforceable Through Title V Permit
20. Records required by conditions on this permit shall be made readily available for District inspection upon request. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Particulate matter (PM10) emission rate at RTO exhaust shall not exceed 14.6 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
22. Maximum emission rate of SO<sub>x</sub> (as SO<sub>2</sub>) shall not exceed 0.2 pound per day. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Maximum emission rate of volatile organic compounds (VOC) shall not exceed 184.6 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Maximum emission rate of oxides of nitrogen (NO<sub>x</sub>) shall not exceed 53.8 pounds per day (as NO<sub>2</sub>). [District Rule 2201] Federally Enforceable Through Title V Permit
25. Maximum emission rate of carbon monoxide (CO) shall not exceed 13.4 pounds per day. [District Rule 2201] Federally Enforceable Through Title V Permit
26. The lifetime emissions from total material input (TMI) shall not exceed 2.4 lb-VOC/100 lb-TMI (calculated on a monthly average). [District Rule 4682] Federally Enforceable Through Title V Permit
27. Lifetime emissions of VOC (LE) from total material input (TMI) shall be calculated on a monthly basis using the following equation:  $LE \text{ (lb-VOC/100 lb TMI)} = 100 \times [BAI - (RECOLL * EFF)] / TMI$  where BAI = pounds VOC blowing agent used/month, RECOLL = pounds blowing agent captured/month from reclaim operations, EFF = control efficiency of thermal oxidizer, and TMI is the total material (including virgin and recycled polystyrene, nucleator, colorant and any other solid additives, and all the blowing agents) processed/month. [District Rule 4682] Federally Enforceable Through Title V Permit
28. Quantity of VOCs from the extruders, captured from reclaim operations, RECOLL, shall be calculated on a monthly basis using the following equation:  $RECOLL = (SCRAPBA - RPPBA)$  where SCRAPBA = pounds of thermoformer and extruder scrap VOCs entering the reclaim operations per month from the extruders and RPPBA is the pounds/month RPP VOCs (VOCs in reclaimed polystyrene pellets) made from thermoformer and extruder scrap from the extruders. [District Rule 4682] Federally Enforceable Through Title V Permit
29. District witnessed source testing to demonstrate compliance with VOC and sulfur compound emission limits and RTO control efficiency shall be conducted by independent testing laboratory annually 60 days prior to permit anniversary date. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit
30. Source testing to demonstrate compliance with District Rule 4682 shall be performed using EPA Methods 25 and 25A for gaseous organics at inlet/outlet of RTO. [District Rule 4682] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

31. Compliance with the conditions in the permit requirements for this unit shall be deemed compliance with District Rule 4682. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
32. RTO outlet shall be inspected weekly while in operation for visible emissions. If excessive visible emissions are observed, appropriate action shall be taken. [District Rule 2520] Federally Enforceable Through Title V Permit
33. Records of control system maintenance, inspections, and repair shall be maintained. The records shall include identification of the equipment, date of inspection, corrective action taken, and identification of the individual performing the inspection. [District Rule 2520] Federally Enforceable Through Title V Permit
34. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 4201, section 3.0 (12/17/92) and 4682, sections 5.1 and 5.2 (6/16/94). [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

## **APPENDIX C**

### **Emission Profile**

Permit #: S-892-4-33	<b>Last Updated</b>
Facility: PACTIV LLC	06/09/2021 LEONARDS

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	19637.0	376.0	5329.0	4891.0	67379.0
Daily Emis. Limit (lb/Day)	53.8	1.0	14.6	13.4	184.6
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

## **APPENDIX D**

### **Compliance Certification**



# San Joaquin Valley Air Pollution Control District



## TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

### I. TYPE OF PERMIT ACTION (Check appropriate box)

ADMINISTRATIVE AMENDMENT     MINOR MODIFICATION     SIGNIFICANT MODIFICATION

COMPANY NAME: Pactiv LLC		FACILITY ID: S-892
1. Type of Organization: <input type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility		
2. Owner's Name:		
3. Agent to the Owner:		

### II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial applicable circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true, accurate, and complete.
- For minor modifications, this application meets the criteria for use of minor permit modification procedures pursuant to District Rule 2520.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Dennis P. Hughes  
Signature of Responsible Official

2/23/2021  
Date

Dennis Hughes  
Name of Responsible Official (please print)

Plant Manager  
Title of Responsible Official (please print)

**APPENDIX E**  
**SO<sub>x</sub> Emissions Calculation Spreadsheets**

## Conversion of fuel gas sulfur concentration gr S/100 dscf (as H<sub>2</sub>S) to ppmv-S

Enter fuel gas sulfur concentration in gr/100 dscf >>>>>  gr S/100 dscf (as H<sub>2</sub>S)

Resulting fuel gas sulfur concentration in ppmv **15.9** ppmv S

### Notes

Fuel gas **sulfur** content by definition includes all sulfur compounds (i.e. H<sub>2</sub>S **plus** all forms of mercaptans).

Sulfur concentrations in ppmv do not rely on molecular weight, and therefore need not be referenced to a particular compound.

Sulfur concentrations in gr/100 dscf must be referenced to a particular compound. In this case, since most of the sulfur in gas in question is generally H<sub>2</sub>S,

### Data used in calculation:

Molecular weight of H <sub>2</sub> S	34 lb/lb-mole
Molar volume	379 scf/lb-mole (@ 60 deg F, 14.7 psia)
Weight conversion	7000 gr/lb



