



Department of
Environmental
Conservation

Saint-Gobain McCaffrey Street Thermal Oxidizer Installation

**Silicone rubber manufacturing and
polytetrafluoroethylene (PTFE) powder processing**

Silicone Rubber Manufacturing

1. **Mixing Operations** – production involves mixing raw silicone rubber with peroxides, catalysts, accelerants, pigments and fillers on mills
2. **Curing Operations** – the material is then processed in one of two processes, either rotocuring operations or sponge press operations, depending upon the product desired
3. **Post-Cure Operations** - finally, the material is processed on a batch basis through post-curing electric ovens



PTFE Billet Manufacturing

- PTFE powder press and electric sintering ovens within the Skive Area
- There are six sintering ovens connected to three stacks
- The ovens are designed to vent ambient oven air which heats and expands during the sintering operation

McCaffrey Street Emissions

Emissions (actual emissions from most recent permit application):

Volatile Organic Compounds (VOC)	0.6 tons/yr
Benzene	32 lbs/yr
Particulate Matter <10 microns	1.1 tons/yr
Particulate Matter <2.5 microns	0.9 tons/yr
Oxides of Nitrogen	0.8 tons/year



Permitting

Application received June 27, 2018

- Full Air State facility application received
- Independent emissions testing submitted qualifying potential process emissions

Registration issued July 13, 2018 expires July 12, 2028

- Requires record keeping
- Emissions tracking

Stack Testing within 180 days of startup

- Stack testing will be scheduled at a regular interval



Regenerative Thermal Oxidizer (RTO)



Emissions Control/Treatment

- The oxidizer will control emissions from the post-cure ovens, the rotocure, the sponge press area, and the pressure sensitive adhesive sheet roller.
- Odor mitigation
- Benzene Reductions
- We received estimated concentrations of tetrafluoroethylene (TFE) and VOCs in the emissions from EPA ORD in late September. Based on these results the PTFE Sintering ovens will require no additional air pollution controls under our Process Operations Regulation. They will not be treated by the RTO at this time.