| NORTH CAROLINA DIVISION OF AIR QUALITY Application Review | | | | | | Region: Asheville Regional Office County: Burke NC Facility ID: 1200076 Inspector's Name: Harold Brady | | | |
|--|-----------------|--|---|--|----------|--|--|--|--|
| Issue Date: | | | Date of Last Inspection: 12/04/2018 Compliance Code: 3 / Compliance - inspection | | | | | | |
| Facility Data | | | | | | | Permit Applicability (this application only) | | |
| Applicant (Facility's Name): Saft America Inc. | | | | | | SIP: 15A NCAC 2Q .0513 NSPS: N/A | | | |
| Facility Address: Saft America Inc. | | | | | | | NESHAP: N/A PSD: N/A | | |
| 313 Crescent Street Valdese, NC 28690 | | | | | | | PSD Avoidance: N/A NC Toxics: N/A | | |
| SIC: 3692 / Primary Batteries, Dry And WetNAICS: 335912 / Primary Battery Manufacturing | | | | | | | 112(r): Yes Other: N/A | | |
| Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V | | | | | | | | | |
| | a | Contact | | | <u> </u> | | Aj | pplication Data | |
| Facility Contact Michael McGuire | | Authorized Contact Richard Boyens | | Technical Contact Michael McGuire | | Application Number: 1200076.18B Date Received: 07/12/2018 | | | |
| Environmental Health and Safety Manager | | General Manager (828) 874-4111 313 Crescent Street | | Environmental Health and Safety Manager (828) 874-4111 | | Application Type: Renewal Application Schedule: TV-Renewal Existing Permit Data | | | |
| (828) 874-4111 313 Crescent Street Valdese, NC 28690 | | Valdese, NC 28690 | | 313 Crescent Street Valdese, NC 28690 | | Existing Permit Number: 04595/T15 Existing Permit Issue Date: 04/01/2014 Existing Permit Expiration Date: 03/31/2019 | | | |
| Total Actua | al emissions in | n TONS/YEAR | : | | | | | - - | |
| СҮ | SO2 | NOX | VOC | СО | PM10 | To | tal HAP | Largest HAP | |
| 2017 | 0.1300 | 0.5300 | 80.22 | 0.4500 | 0.010 | 0 | 0.2877 | 0.2566 [Glycol Ethers, Unlisted - Spec] | |
| 2016 | 0.0600 | 0.4600 | 78.61 | 0.4000 | 0.020 | 0 | 0.2597 | 0.2289 [Glycol Ethers, Unlisted - Spec] | |
| 2015 | 0.0450 | 0.3600 | 51.97 | 0.3200 | 0.020 | 0 | 0.0719 | 0.0592 [Glycol Ethers, Unlisted - Spec] | |
| 2014 | 0.0357 | 0.3700 | 56.15 | 0.3200 | 0.020 | D | 0.0363 | 0.0252 [Glycol Ethers, Unlisted - Spec] | |
| 2013 | 0.1312 | 0.4900 | 106.36 | 0.4200 | 0.030 | 0 | 0.1978 | 0.1690 [Glycol Ethers, Unlisted - Spec] | |
| | | ¥7 | | | | 6 | | | |
| Review Engineer: Alice Wessner Review Engineer's Signature: Date: | | | | Comments / Recommendations: Issue: 04595/T16 Permit Issue Date: XXXX, 2019 Permit Expiration Date: XXXX, 2019 | | | | | |

1. Purpose of Application

Saft America, Inc. (Saft) currently holds Title V Permit No. 04595T15 with an expiration date of March 31, 2019 for a lithium sulfur dioxide battery manufacturing facility in Valdese, Burke County, North Carolina. This permit application is for a permit renewal. The renewal application was received on July 12, 2018, which is **not** nine months prior to the expiration date. Therefore, the existing permit may expire if the renewed permit is not issued by March 31, 2019. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

Saft certified that:

(1) the current air quality permit identifies and describes all emissions units at the above subject facility, except where such units are exempted under the North Carolina Title V regulations at 15A NCAC 02Q .0500,

(2) the current air quality permit cites all applicable requirements and provides the method or methods for determining compliance with the applicable requirements.

2. Facility Description

Saft primarily manufactures lithium sulfur dioxide batteries. The manufactured battery has carbon/aluminum cathode; a lithium metal anode; and a sulfur dioxide, lithium bromide, and acetonitrile electrolyte. The facility currently operates 16 hours per day, with one full eight-hour shift and a seasonal partially-manned shift, 5 days per week, and employs ~ 260 people. Production is currently ~550,000 Li-SO₂ cells per month (6 to 7 million cells per year) where peak production several years ago was ~75,000 cells per day. Li-MnO₂ batteries are also manufactured on site and used in communication devices.

3. History/Background/Application Chronology

| April 1, 2014 | Air Permit issued with an expiration date of March 31, 2019. |
|-------------------|--|
| July 24, 2018 | Received application for a TV permit renewal. |
| October 31, 2018 | Emailed Michael McGuire of Saft requesting an update of the RMP. |
| November 29, 2018 | Comments received from Michael McGuire of Saft. |
| December 6, 2018 | Emailed Harold Brady of the Asheville Regional office (ARO) with |
| | questions. |
| December 11, 2018 | Comments received from Harold Brady ARO |
| January 28, 2019 | Comments from Booker Pullen, permitting supervisor |
| January 31, 2019 | Comments from regional office received |
| February 8, 2019 | Comments from Permittee received |
| February 11, 2019 | Draft permit and permit review forwarded to public notice |
| XXXXX 2019 | Public comment period ends. No comments received. (one month) |
| XXXXX 2019 | EPA comment period ends. |
| XXXXX 2019 | Permit issued. |

4. **Permit Modification/Changes**

| Page(s) Section | | Description of Change(s) | | |
|-----------------|--------------------------|--|--|--|
| Attachment | | + Added footnote 3 to bottom of insignificant activities | | |
| to cover | Insignificant Activities | list | | |
| letter | - | | | |
| All | All | + Updated dates and permit revision number | | |
| | 2.1 A.3 | Removed requirement for 15A NCAC 02D .0958: WORK | | |
| | | PRACTICES FOR SOURCES OF VOLATILE ORGANIC | | |
| | | COMPOUNDS from Permit 04595T15 | | |
| | 2.1 B.3 | Removed requirement for 15A NCAC 02D .0958: WORK | | |
| | | PRACTICES FOR SOURCES OF VOLATILE ORGANIC | | |
| | | COMPOUNDS from Permit 04595T15 | | |
| 8-16 | 3 | + Updated General Conditions to version 5.3 | | |

5. **Regulatory Review**:

As there were not any significant changes in the applicable regulations with the exception of 15A NCAC 02D .0958, a regulatory discussion for each regulation will not be included in this document.

The facility is currently subject to the following regulations:

15A NCAC 02D .0521, Control of Visible Emissions – The facility is subject to 02D .0521 but has no monitoring, recordkeeping, or reporting requirements for demonstrating compliance with this regulation

15A NCAC 02D .1806, Control and Prohibition of Odorous Emissions

15A NCAC 02D .2100, Risk Management Program

15A NCAC 02Q .0317, Avoidance Conditions (for 15A NCAC 02D .0530, Prevention of Significant Deterioration)

NC General Statute, 143-215.108, Control of sources of air pollution; permits required

On November 1, 2016, amendments to 15A NCAC 02D .0902 were finalized to narrow applicability of work practice standards in 15A NCAC 02D .0958 from statewide to the maintenance area for the 1997 8-hour ozone standard. This change is being made primarily because the abundance of biogenic VOC emissions in North Carolina results in ozone formation being limited by the amount of available nitrogen oxides (NOx) emissions. Provisions of the Clean Air Act require VOC requirements previously implemented in an ozone nonattainment area prior to redesignation remain in place. However, facilities outside the maintenance area counties for the 1997 8-hour ozone standard would no longer be required to comply with the work practice standards in 15A NCAC 02D .0958. Burke County was never in nonattainment for ozone and 15A NCAC 02D .0958 is no longer applicable to facilities, including Saft, within the county. The permit condition for 15A NCAC 02D .0958 will be removed under this permit renewal.

6. NSPS, NESHAP, PSD, 112(r) and CAM:

a. NSPS

The facility is not currently subject to any New Source Performance Standards. This permit renewal does not affect this status.

b. NESHAP

This facility is not a major source of HAPs. This permit renewal does not affect this status.

Boiler ID No. I-4 burns only natural gas and is therefore not subject to 40 CFR 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. Per 40 CFR 63.11195(e), gas-fired boilers are not subject to this Subpart.

c. PSD

Saft has limited facility-wide VOC emissions to less than 250 tpy in accordance with 15A NCAC 02D .0317 to maintain minor source status under the PSD program (15A NCAC 02D .0530). In 2017, total reported actual VOC emissions were 80.22 tons.

d. 112(r)

This facility is subject to 112(r) due to its sulfur dioxide storage tank (ID No. SO2TANK, 5,000-gallon capacity). As included in Section 2.3 of the revised air permit, the facility is required to submit an update to its Risk Management Plan (RMP) to EPA. An update of the plan was completed on November 9, 2018.

e. CAM

40 CFR 64 requires that a compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold and use a control device to meet an applicable standard. The following table indicates the current equipment/control device relationships:

| Emission Source ID No. | Emission Source Description | Control Device ID No. | Control Device Description |
|------------------------------|--|-----------------------------|--|
| ES-03 | Sulfur dioxide storage area, the electrolyte mixing area, and the battery filling line | CD-03 | One packed-bed caustic wet scrubber (230 gallons per minute liquid injection rate) |
| ES-04 | Cell destruct room | CD-04 | One packed-bed caustic wet scrubber (75 gallons per minute liquid injection rate) |
| SO2TANK | One sulfur dioxide storage tank (5,000-gallon storage capacity) | CD-03 | One packed-bed caustic wet scrubber (230 gallons per minute liquid injection rate) |

However, CAM does not apply as the facility is not using a control device to achieve compliance with a numerical limitation.

7. Facility-wide Air Toxics:

This permit renewal does not trigger an air toxics review.

8. Facility Emissions Review

There is no change in Title V potential emissions for this renewal. Actual emissions for 2013 - 2017 are provided in the header to this document.

9. Facility Compliance Status:

The last full inspection of this facility was completed on December 4, 2018 by Harold Brady of the ARO. At the time of the inspection, Saft "appeared to be in compliance with the applicable air quality regulations and Air Permit No. 04595T15."

Five-year compliance history

On August 25, 2015, DAQ issued a Notice of Deficiency (NOD) to Saft for not performing monthly inspections as required by 15A NCAC 02D .0958. On September 6, 2017, DAQ issued a NOD to Saft for deficiencies in their RMP.

All NODs have been resolved.

10. Draft Permit Review Summary:

The Asheville Regional Office was provided a draft permit and draft permit review document on January 30, 2019. ARO responded

Michael McGuire of Saft America was provided a draft permit for review on February 7, 2019. No comments were received at the time the permit was sent to notice.

U.S. EPA was provided a draft permit for review on February 11, 2019. No comments were received at the time of permit issuance.

A 30-day public notice period was initiated on February 11, 2019. No comments were received at the time of permit issuance.

11. Conclusion

Recommend issuance of Air Permit No. 04595T16.