

## Application Review

**Issue Date:**

**Region:** Wilmington Regional Office  
**County:** New Hanover  
**NC Facility ID:** 6500355  
**Inspector's Name:** Linda Willis  
**Date of Last Inspection:** 12/13/2016  
**Compliance Code:** 3 / Compliance - inspection

<p style="text-align: center;"><b>Facility Data</b></p> <p><b>Applicant (Facility's Name):</b> Tima Capital Inc</p> <p><b>Facility Address:</b>  Tima Capital Inc  800 and 810 Sunnyvale Drive  Wilmington, NC 28412</p> <p><b>SIC:</b> 7342 / Disinfecting And Exterminating  <b>NAICS:</b> 56171 / Exterminating and Pest Control Services</p> <p><b>Facility Classification: Before:</b> Synthetic Minor <b>After:</b> Title V  <b>Fee Classification: Before:</b> Synthetic Minor <b>After:</b> Title V</p>	<p style="text-align: center;"><b>Permit Applicability (this application only)</b></p> <p><b>SIP:</b> 02D .0202, 02D .0535, 02D .0540, 02Q .0504  <b>NSPS:</b>  <b>NESHAP:</b>  <b>PSD:</b>  <b>PSD Avoidance:</b> 02Q .0317  <b>NC Toxics:</b>  <b>112(r):</b>  <b>Other:</b></p>
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Contact Data			Application Data
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<p><b>Application Number:</b> 6500355.17A  <b>Date Received:</b> 10/20/2017  <b>Application Type:</b> Modification  <b>Application Schedule:</b> State  <p style="text-align: center;"><b>Existing Permit Data</b></p> <b>Existing Permit Number:</b> 10302/R01  <b>Existing Permit Issue Date:</b> 04/01/2015  <b>Existing Permit Expiration Date:</b> 05/01/2018</p>
Timurlan Aitaly President (910) 769-3273 340 Shipyard Boulevard Wilmington, NC 28412	Timurlan Aitaly President (910) 769-3273 340 Shipyard Boulevard Wilmington, NC 28412	Neil Moore  (910) 769-3273 340 Shipyard Boulevard Wilmington, NC 28412	

Total Actual emissions in TONS/YEAR:							
CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP

No emissions inventory on record. The emissions inventory is due 01/31/2018.

<p><b>Review Engineer:</b> Urva Patel</p> <p><b>Review Engineer's Signature:</b> _____ <b>Date:</b> _____</p>	<p style="text-align: center;"><b>Comments / Recommendations:</b></p> <p><b>Issue</b> 10302/R02  <b>Permit Issue Date:</b>  <b>Permit Expiration Date:</b></p>
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### 1. Purpose of Application:

Currently, Tima Capital Inc. holds Air Quality Permit No. 10302R01 for Construction and Operation with an expiration date of May 1, 2018. This modification application (**Application No. 6500355.17A**) was received on October 20, 2017. The application requests the following:

- To change ownership from Royal Pest Solutions to Tima Capital Inc
- Consent to increase the use of methyl bromide
- Change the facility permit class from synthetic minor to Title V in a two-step process.

### 2. Facility Description:

Tima Capital, Inc is a fumigation facility located in Wilmington, New Hanover County, North Carolina.

This log yard is for a pest control / fumigation operation and loading logs into containers for export. The facility uses methyl bromide as the fumigant. Methyl bromide is a VOC and a federal HAP but it is not a North Carolina TAP. Pine logs (rough cut with bark) will be placed/pushed into truck trailers at the property, the doors will be shut, and then the containers are tarped. The logs are gassed with internal gas supply lines from pressurized gas cylinders with methyl bromide. There is no roof or shelter at this location – it is done outside. The trailers are gassed with methyl bromide for about 5 minutes and then held for an exposure period of 16-72 hours. When the concentration level is acceptable, the tarps are removed and the trailers are transported to the NC State Port - Wilmington for shipping.

### 3. History / Background / Application Chronology:

#### Permit History Since Last Permit Renewal

May 3, 2013 Air Quality Permit No. 10302R00 issued with an expiration date of May 1, 2018. It includes construction and operation of **ID No. ES-1**.

April 1, 2015 Air Quality Permit No. 10302R01 issued with an expiration date of May 1, 2018. It includes addition of the adjacent address to the facility location which has been leased by written agreement as additional space for the facility to expand the operations.

#### Application Chronology

October 20, 2017 Received application for state minor modification.

October 23, 2017 Sent acknowledgement letter indicating that the application for permit modification was complete.

February 7, 2018 Draft permit was sent to facility for review.

February 9, 2018 Received comments from facility on draft permit review. For detailed information, see Section 12.

February 14, 2018 Ms. Linda Willis (Wilmington Regional Office) commented on Permit review for addition of recent NOV to Royal Pest Solutions.

February 15, 2018 The Department received a comment on draft permit regarding removal of initiation of another fumigation while existing activity is still in progress as it will put their facility behind schedule to meet the State Ports and Vessel schedule for export. See Section 12 for detailed information.

### 4. Summary of Changes to the Existing Permit (Permit No. 10460R01):

Page No.	Section	Description of Changes
Cover Letter	N/A	<ul style="list-style-type: none"> <li>Updated cover letter with the conversion from synthetic minor to Title V permit, application number, permit numbers, dates, fee class, PSD increment statement, and Director name.</li> </ul>
Permit Cover	N/A	<ul style="list-style-type: none"> <li>Inserted new issuance and complete application date, application number, facility information.</li> </ul>
3	Section 1 – Table	<ul style="list-style-type: none"> <li>Revised Emission Source Description for <b>ID No. ES-1</b></li> </ul>
3-7	Section 2	<ul style="list-style-type: none"> <li>Included changes with the conversion from synthetic minor to Title V permit.</li> </ul>
4	2.1 A.6	<ul style="list-style-type: none"> <li>Added “State-enforceable only” condition per applicant request</li> </ul>
7	2.1 A.7	<ul style="list-style-type: none"> <li>Added Title V permit requirement condition</li> </ul>
3-9	Section 2, Section 3	<ul style="list-style-type: none"> <li>Updated regulation references from “2D” and “2Q” to “02D” and “02Q” to be consistent with regulation nomenclature.</li> </ul>

### 5. Compliance Status:

DAQ has reviewed the compliance status of this facility. During the most recent inspection conducted on December 13, 2016, Linda Willis of the Wilmington Regional Office indicated that the facility appeared to be in compliance with all applicable requirements.

*Five-year Compliance History:*

- On September 28, 2015, a Notice of Violation was sent to the Permittee for two late monthly reports for the months of October and November of 2015.
- On January 22, 2016, a Notice of Deficiency was sent to the Permittee for a late monthly report for August 2015.
- The Permittee's response to the Notice of Violation was acceptable and the reports have been received on time for the remainder of calendar year 2015 to present.
- On February 7, 2018, a Notice of Violation was sent to the Permittee for exceedance of the 10-ton HAP limit and Inaccurate recordkeeping and reporting for the 12-month rolling total methyl bromide usage from January 2017 through January 2018.

**6. New/Modified Equipment/Changes in Emissions:**

The facility has requested for following changes to the facility permit:

- to change ownership from Royal Pest Solutions(RPS) to Tima Capital Inc.
- increased use of methyl bromide, estimated at a minimum 31.2 tons per year and maximum 62.4 tons per year.

Theoretical Maximum calculations:

Monthly 1000 container of 40' is equal to 12000 containers of 40' per year.  
3000 of them in December/January/February months and 9000 of them in the rest 9 months.

If fumigation will happen only in the containers:

November/December/January = 3000 container \* 20 lbs of methyl bromide per 40' HC container  
= 60000 lbs  
The rest 9 months = 9000 container \* 13 lbs of methyl bromide per 40' HC container  
=117000 lbs  
Total will be 177000 lbs / 2000 = 88.5 ton of methyl bromide.

If fumigation will happen only in the bulk piles:

November/December/January = 3000 container / 12 containers  
= 250 bulk piles \* 240 lbs of methyl bromide per pile  
= 60000 lbs  
The rest 9 months = 9000 container / 12 containers  
= 750 bulk piles \* 160 lbs of methyl bromide per pile  
= 120000 lbs  
Total will be 180000 lbs / 2000 = 90.0 ton of methyl bromide.

**7. Regulatory Review**

Unless specifically noted, a detailed discussion of the following list of the applicable equipments and all associated permit conditions is not included as applicability status has not changed. The permit conditions have been modified to reflect the most current language, where it's necessary. The facility is required to be in continued compliance.

**A. One fumigation process utilizing methyl bromide on import/export commodities in shipping containers and/or in bulk piles  
(ID No. ES-1)**

1. Applicable Regulatory Requirements:

- 15A NCAC 02D .0202: Registration of Air Pollution Sources
- 15A NCAC 02D .0535: Excess Emissions Reporting and Malfunctions
- 15A NCAC 02D .0540: Particulates from Fugitive Dust Emission

- 15A NCAC 02Q .0317: Avoidance Condition (for 15A NCAC 02D .0530: Prevention of Significant Deterioration)
- 15A NCAC 02Q .0504: Option for Obtaining Construction and Operation Permit
- Applicant Requested (STATE-ENFORCEABLE ONLY)

The facility is a Title V facility because the potential emission of HAP exceeds 10 tpy.

As requested by the application, the Permittee shall install and operate an emissions exhaust system consisting of an aeration fan and elevated stack to enhance dispersion of methylene bromide and reduce ambient concentrations of the pollutant near the fumigation operation.

General compliance:

- The facility will be required to send an initial notification of commencement of operation to the regional office within 15 days of start-up.
- The facility will be required to notify adjacent neighbors and post signs prior to initial and subsequent fumigation operations
- The facility is required to install wind sock on-site.

Operational Limitations:

The facility does not have a control device to comply with emission limit. Therefore, it is going to be subject to operational limitations to comply with emission limit of zero parts per million at the property boundary.

- The facility will be required to use only methyl bromide as fumigant
- The facility will be required to follow an ambient monitoring plan to establish a maximum daily total charge of methyl bromide (lb/day) while keeping the concentration of methyl bromide at zero ppm at property boundary downwind of emission source.
- The Permittee shall not initiate another fumigation activity, if there is an existing fumigation still in progress.

Monitoring/Recordkeeping:

The facility will be required to monitor and record total methyl bromide charge daily in pounds per day, wind direction and wind speed. It is also required to record all ambient monitoring data, copy of each notification and all compliance reports.

Reporting Requirements:

The facility will be required to submit a summary report quarterly.

2. Changes per the State Permit

- To increase use of methyl bromide, estimated at a minimum 31.2 tons per year and maximum 62.4 tons per year.
- Removal of 15A NCAC 02D .0958: Work Practices for Sources of VOC since it's not applicable statewide anymore.
- Addition of Avoidance condition (15A NCAC 02Q .0317) and TV Permit application submittal requirement condition (15A NCAC 02Q .0504)
- Addition of State-enforceable condition as per applicant request

## **8. NSPS, NESHAP/MACT, NSR/PSD, 112(r), CAM**

### **NSPS**

This facility is NOT subject to New Source Performance Standards (NSPS), 40 CFR 60. This permit modification does not change this status.

### **NESHAP/MACT**

This facility is subject to the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63. This permit modification does not change this status. For detailed information, see Section 7, State-enforceable only condition as per applicant request.

**NSR/PSD**

New Hanover County has triggered PSD Minor baselines for PM10, SO<sub>2</sub>, and NO<sub>x</sub>. This facility is a “250 tons” industrial category source and currently a “minor” source for PSD. The facility has taken limitation to avoid PSD by limiting the VOC potential to emit to less than 250 tons/yr.

The permit includes a PSD avoidance condition for VOC emissions:

Emission Source(s)	PSD Avoidance Condition for VOC
Methyl Bromide Fumigation (ID No. ES-1)	< 250 tons per year of VOC emissions

Compliance with this regulation is monitored through VOC emission calculations, recordkeeping, and reporting.

**112(r)**

This facility is NOT subject to the requirements of the Chemical Accident Release Prevention Program, Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above thresholds.

**Compliance Assurance Monitoring (CAM)**

Pursuant to 40 CFR 64.2, the provisions of the Compliance Assurance Monitoring (CAM) rule are applicable to emission units that meet all of the following criteria:

- Criteria #1: The unit is subject to an emission limitation AND uses a control device to achieve compliance with the limit;
- Criteria #2: The unit has pre-control potential emissions that are equal to or greater than 100% of the amount (in tpy) required for a source to be classified as a major source (i.e., 100 tpy of any criteria pollutant or 10 tpy of any HAP, North Carolina); and,
- Criteria #3: The unit is not exempt under 40 CFR 64.2(b).

The following table summarizes CAM applicability at Tima Capital Inc:

Emission Unit	Criteria #1: Does the Source Use a Control Device?	Criteria #2: Pre-control PTE ≥100% of major source thresholds?	Criteria #3: Exempt Under 40 CFR 64.2(b)?	CAM Source?
ES-1	No	Yes (VOC)	VOC: No	No

Therefore, the facility is NOT subject to CAM.

**9. Facility-Wide Air Toxics:**

The facility is not subject to the requirements of air toxics permitting. Methyl Bromide is a VOC/HAP but not a NC air toxic. Therefore, no modeling is required and no further air toxics evaluation is required with this modification.

**10. Facility-wide Emission Review:**

Based on the potential emissions shown below, this facility is classified as a Title V facility. VOC emissions are referenced from the permit application. VOC emissions are reported as 100% Methyl Bromide.

Pollutant	Expected Actual Emissions	Potential Emissions
VOCs	62.4 tons/yr	62.4 tons/year

**11. Other Regulatory Considerations:**

- A Permit Application fee was received for Permit Application No. 6500355.17A and was included as part of the permit application.
- A P.E. Seal is NOT required for this permit application.
- A zoning consistency determination per 02Q .0304(b) was received for this proposed modification and was provided in this permit application. The facility submitted the zoning consistency determination from October 19, 2017.
- The Director has decided that a 30-day public notice period will be provided for this facility per 15A NCAC 02Q .0309(a)(1) for a source that may be designated by the Director based on public interest.

## 12. Comments from Facility (during Review of Draft Permit):

### Facility comment on February 9, 2018 Friday

Facility: Is this correct? If so, what protects Tima until it files its Title V application?

DAQ: Many of the comments regarding dates will be resolved when our Wilmington Regional Office issues Royal's renewal in the near future.

Facility: Emission Inventory requirement: Note that the 90 days has already passed. Will this be enforced?

DAQ: Same as above.

Facility: We can certainly provide the notice required by the methyl bromide product label. I am not aware of any EPA Preparedness Measures for commodity fumigation with methyl bromide, although I am aware of such measures for soil fumigation. I would like to review the EPA measures that DENR refers to.

DAQ: The two methyl bromide product labels you provided us on Nov 9, 17 for Metabrom Q and Meth-O-Gas Q both have a section for Emergency Preparedness Measures on page 15 of the label. We thought it is prudent to adopt this requirement in the Air Quality Permit.

Facility: Just to clarify: if bulk, then 20 readings in the course of an hour; and if container, then only 1 reading?

DAQ: Monitoring begins at the beginning of aeration ie. when the first container is opened, the tarp is being removed, or active aeration begins when using fans.

Facility: But if per II, the reading is taken after the last container is opened, then there will be no more containers to open.

DAQ: See comment above. At any point during ambient monitoring, Methyl Bromide >0 ppm is measured at the property boundary, aeration must be halted until the concentration drops to zero for 15 minutes.

Facility: One monitoring event per fumigation event? So, one reading each time we fumigate? Or one monitoring event per calendar quarter?

DAQ: One per quarter.

Facility: What is meant by "subsequent ambient monitoring" here?

DAQ: These need to be consecutive quarters until the quarterly monitoring is satisfied then quarterly monitoring goes to semi-annual monitoring. The monitoring is done however, during a qualifying fumigation (ie. using 90% of the established Methyl Bromide daily limit).

Facility: Could you clarify if this requirement is in addition to the reporting requirement at 2.1 A.6.1? They appear to be essentially the same, but with different due dates.

DAQ: I think we can remove this since quarterly reporting which includes the data collected during ambient monitoring is required in the reporting section to follow.

Facility: RPS keeps records by use of iPads on site to record data. The data is uploaded into a database. We can furnish daily amounts of Methyl Bromide used by request to the office at any time, but they may not be available on site unless a technician with an iPad is present. Monthly totals and rolling totals are no problem.

DAQ: We typically accept electronic documentation. They would need to be accessible for DAQ review the same business day if requested.

Facility comment on February 15, 2018 Thursday:

Facility: The only comment that Tima Capital and Royal Pest Solutions from our reviews of the Final Draft Title V Permit, is on Page 5, Operational Limitations, IV: “The Permittee shall not initiate another fumigation activity if there is an existing fumigation activity still in progress.”

Tima Capital sometimes has to fumigate more than one time a day. For Example, if a bulk pile is fumigated at 10:00 a.m. and we need containers fumigated at 3:00 p.m., does this mean that we cannot fumigate the containers as the fumigation activity at the bulk pile is still in progress with the 16 hours of fumigation and then 3-4 hours aeration for Pine and 72 hours of fumigation and up to 24 hours aeration for Hardwood. Another example is that we have one container fumigated in the morning and then finally get the empty containers for loading more logs for fumigation in the afternoon and want to start fumigating the additional containers, does this mean that we can only do the one container and have to wait until the 16 hours and 3-4 hours aeration is done which would be the next day.

If Tima Capital can only fumigate one time a day, it will put our firm behind schedule to meet the State Ports and Vessel schedules for export.

Per our telephone conversation, you will contact Tima Capital before finalizing the draft permit.

Look forward to hearing from you as to whether Operational Limitation, IV, can be eliminated or reworded in order to fumigate more than one time a day.

DAQ: We have accepted this correction after internal meetings and facility comments.

### **13. Public Notice and Affected State(s) Review**

The Director has decided that a 30-day public notice period will be provided for this facility per 15A NCAC 02Q .0309(a)(1) for a source that may be designated by the Director based on public interest.

### **14. Recommendations/Conclusion:**

TBD