



Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

November 5, 2013

Mr. Jason Stanley
HSE Specialist
Finnchem USA, Inc.
PO Box 100
Eastover, South Carolina, 29044

Re: Renewed Conditional Major Operating Permit No. CM-1900-0172

Dear Mr. Stanley:

Enclosed is a renewed Conditional Major Operating Permit No. CM-1900-0172 that will become effective on January 1, 2014. The federally enforceable emissions limitations and operational requirements contained within this Conditional Major Operating Permit are designed to restrict this facility's potential to emit to below major source thresholds. This renewed Conditional Major Operating Permit will be valid through December 31, 2023.

Please be advised that a new periodic reporting period begins upon the effective date of this renewed permit. Abbreviated periodic reports shall be completed and submitted in accordance with the previous permit's conditions and shall cover the interim period between the previous permit reporting period and the renewed permit reporting period. Reports required under the terms and conditions of this renewed Conditional Major Operating Permit must be completed and submitted in a timely manner in accordance with the periodic reporting schedule found in Part 8 of this permit.

It is important for you and/or an authorized representative responsible for the overall operation of this facility to read this issued permit carefully and to understand all requirements. If any errors or omissions are discovered, please notify Snezana Popova of my staff, via e-mail at popovasn@dhec.sc.gov, or call (803) 898-3823 immediately.

Pursuant to the South Carolina Administrative Procedures Act, any Department decision involving the issuance, denial, suspension, or revocation of a permit or certification may be appealed by the applicant, permittee, licensee, or affected person. Please see the enclosed "Guide to Board Review" for guidelines on filing an appeal.

Sincerely,

Elizabeth J. Basil
Director, Engineering Services Division
Bureau of Air Quality

EJB:snp:kal
Enclosure

cc: Conditional Major File: 1900-0172
ec: Ben Buchanan , BEHS



Office of Environmental Quality Control Bureau of Air Quality Conditional Major Operating Permit

**Finnchem USA, Inc.
200 Wateree Station Road
Eastover, South Carolina 29044**

Pursuant to the provisions of the *Pollution Control Act*, Sections 48-1-50(5) and 48-1-110(a), the *1976 Code of Laws of South Carolina*, as amended, and *South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards*, the Bureau of Air Quality authorizes the operation of this facility and the equipment specified herein in accordance with valid construction permits, and the plans, specifications, and other information submitted in the Conditional Major Operating Permit request received on March 13, 2013, as amended.

The operation of this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

Permit Number:	CM-1900-0172	Effective Date:	January 1, 2014
Issue Date:	November 1, 2013	Expiration Date:	December 31, 2023

**Director, Engineering Services Division
Bureau of Air Quality**

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PART 1 - GENERAL INFORMATION

PART 1.A - APPLICABLE PERMIT DATES

ISSUED DATE:	November 5, 2013
EFFECTIVE DATE:	January 1, 2014
EXPIRATION DATE:	December 31, 2023
RENEWAL APPLICATION DUE:	October 3, 2023

PART 1.B - FACILITY INFORMATION

FEDERAL EMPLOYER IDENTIFICATION NO.:	56-0852992
SIC CODE(S):	2819
NAICS CODE(S):	325188
EPA (AIRS) FACILITY ID NUMBER:	4507900172

PART 1.C - FACILITY PHYSICAL ADDRESS

FACILITY STREET ADDRESS:	200 Wateree Station Road
CITY, STATE, ZIP FACILITY IS LOCATED IN:	Eastover, South Carolina 29044
COUNTY FACILITY IS LOCATED IN:	Richland

PART 1.D - FACILITY ENVIRONMENTAL CONTACT INFORMATION

ENVIRONMENTAL CONTACT NAME:	Mr. Jason Stanley
CONTACT MAILING ADDRESS:	P.O. Box 100
CONTACT CITY, STATE, ZIP:	Eastover, South Carolina 29044
CONTACT TELEPHONE NUMBER:	803-353-3348
CONTACT INTERNET E-MAIL ADDRESS:	jason.stanley@kemira.com

PART 1.E - FACILITY BILLING ADDRESS

BILLING CONTACT NAME:	Mr. Jason Stanley
FACILITY NAME:	Finnchem USA Inc.
BILLING CONTACT ADDRESS:	P.O. Box 100
BILLING CONTACT CITY, STATE, ZIP:	Eastover, South Carolina 29044

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PART 2 - APPLICABILITY

PART 2.A - GENERAL APPLICABILITY (S.C. Regulation 61-62.1, Section II(G)(2))

Condition Number	Condition
2.A.1	This federally enforceable permit has been requested by the permittee in accordance with S.C. Regulation 61-62.1, Section II(G), Conditional Major Operating Permits.
2.A.2	Any stationary source that satisfies the definition of a major source may request a federally enforceable conditional major operating permit to limit the source's potential to emit and become a conditional major source.
2.A.3	Any stationary source that has received a synthetic minor construction permit to limit the source's potential to emit below major source threshold levels, that is not required to obtain a Title V operating permit, shall be issued a conditional major operating permit to consolidate the source's limitations on potential to emit, and shall be considered a conditional major source.

PART 2.B - CRITERIA (S.C. Regulation 61-62.1, Section II(G)(6))

Condition Number	Condition
2.B.1	This federally enforceable permit includes permit conditions that shall constrain the operations of the source such that potential emissions fall below applicable regulatory levels and therefore exclude the source from the requirements to have a Title V operating permit.
2.B.2	This federally enforceable permit includes permit conditions that specify the monitoring parameters, recordkeeping, and reporting requirements the source will use to determine and verify compliance with the requested federally enforceable limitations on a continuous basis.

PART 3 - GENERAL REQUIREMENTS

This part describes conditions and provisions applicable to all conditional major sources. Specific source category conditions and requirements are contained in Part 5 of this permit.

PART 3.A - GENERAL CONDITIONS (S.C. Regulation 61-62.1, Section II(J); S.C. Code, Section 48-1-10, et. seq. - "Pollution Control Act")

Condition Number	Condition
3.A.1	All official correspondence, plans, permit applications and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction or operating permit may be grounds for permit revocation.
3.A.2	This permit only covers emission units and control equipment while physically present at the indicated facility. Unless the permit specifically provides for the equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted facility, notwithstanding the expiration date specified on the permit.

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PART 3.B - PERMIT RENEWAL AND EXPIRATION (S.C. Regulation 61-62.1, Section II(H) & (G)(2))

Condition Number	Condition
3.B.1	In accordance with S.C. Regulation 61-62.1, Section II(H), the permittee shall submit an operating permit renewal request to the Department no later than 90 days prior to the operating permit expiration date. The source may be inspected by the Department in order to decide whether to renew the permit. Past records of compliance and future probability of compliance will be considered in making the decision regarding renewal.
3.B.2	In accordance with S.C. Regulation 61-62.1, Section II(H), operating permit renewal requests shall include a description of any changes at the facility that have occurred since issuance of the last operating permit that may effect the operating permit or operating permit review. In general, the description shall include any addition, alteration or removal of sources, including sources exempt from construction permit requirements; addition, alteration or removal of emission limitations; any changes to monitoring, recordkeeping, or reporting requirements; and any changes or additions to special permit conditions.
3.B.3	Submission of a request for renewal meeting the requirements in S.C. Regulation 61-62.1, Section II(H), shall allow the permittee to continue operating pursuant to the most recent conditional major operating permit, until such time as the Department has taken final action on the request for renewal.

PART 3.C - FEE ASSESSMENT AND PAYMENT (S.C. Regulation 61-30)

Condition Number	Condition
3.C.1	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.

PART 3.D - PUBLIC PARTICIPATION

Condition Number	Condition
3.D.1	Stationary sources requesting an original or renewed conditional major operating permit shall undergo the public participation procedures of S.C. Regulation 61-62.1, Section II(N).
3.D.2	If a Federally enforceable synthetic minor construction permit was issued, the owner or operator may obtain a Conditional Major Operating Permit with no additional public comment period if no substantive changes to limitations are required.

PART 3.E - PERMIT REOPENING (S.C. Code, Section 48-1-10, et. seq. - "Pollution Control Act")

Condition Number	Condition
3.E.1	This permit may be reopened by the Department for cause or to include any new standard or regulation which becomes applicable to a source during the life of the permit.

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PART 3.F - EMERGENCY PROVISIONS (S.C. Regulation 61-62.1, Section II(L))

Condition Number	Condition
3.F.1	<p>In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II(L), the permittee shall demonstrate the affirmative defense of an emergency through properly signed, contemporaneous operating logs, and other relevant evidence that verify:</p> <ol style="list-style-type: none">1. An emergency occurred, and the permittee can identify the cause(s) of the emergency;2. The permitted source was at the time the emergency occurred being properly operated;3. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and4. The permittee gave a verbal notification of the emergency to the Department within 24 hours of the time when emission limitations were exceeded, followed by a written report within thirty (30) days. The written report shall include as a minimum, the information required by S.C. Regulation 61-62.1, Section II(J)(1)(c)(i) through (viii). The written report shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
3.F.2	<p>In any enforcement action, the permittee seeking to establish the occurrence of an emergency has the burden of proof.</p>
3.F.3	<p>This provision is in addition to any emergency, or upset provision contained in any applicable requirement.</p>

PART 3.G - DUTY TO COMPLY (S.C. Regulation 61-62.1, Section II)

Condition Number	Condition
3.G.1	<p>S.C. Regulation 61-62.1, Section II will not supersede any State or Federal requirements nor special permit conditions, unless this regulation would impose a more restrictive emission limit. The owner or operator shall comply with all terms, conditions, and limitations of any Department-issued permit for sources or activities at its facility. A source's permit status may change upon promulgation of new regulatory requirements.</p>

PART 3.H - INSPECTION AND ENTRY (S.C. Regulation 61-62.1, Section II(O))

Condition Number	Condition
3.H.1	<p>Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or an authorized representative to perform the following:</p> <ol style="list-style-type: none">1. Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit.3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.4. As authorized by the Federal Clean Air Act and/or the S.C. Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

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PART 3.I - TRANSFER OF OWNERSHIP (S.C. Regulation 61-62.1, Section II(M))

Condition Number	Condition
3.I.1	Within thirty (30) days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner/operator shall submit to the Department a written request for transfer of the source operating or construction permits. The written request for transfer of the source operating or construction permit shall include any changes pertaining to the company name and mailing address; the facility name and mailing address (if different from that of the company); the name, mailing address, and telephone number of the owner or agent for the company; and any proposed changes to the permitted activities of the source. Transfer of the operating or construction permits will be effective upon written approval by the Department.

PART 4 - FACILITY WIDE GENERAL REQUIREMENTS

This part describes conditions and provisions applicable facility wide. Specific source category conditions and requirements are contained in Part 5 of this permit.

Condition Number	Condition
4.1	<p>In accordance with SC Regulation 61-62.1, Section II(J), for sources not required to have continuous emissions monitors, any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the Department's local Environmental Quality Control (EQC) Regional office within twenty-four (24) hours after the beginning of the occurrence. The contact information for the local EQC Regional office can be found at http://www.scdhec.gov/environment/envserv/regions.htm.</p> <p>The owner or operator shall also submit a written report within thirty (30) days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality (BAQ) and shall include as a minimum, the following:</p> <ol style="list-style-type: none">1. The identity of the stack and/or emission point where the excess emissions occurred;2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions;3. The time and duration of excess emissions;4. The identity of the equipment causing the excess emissions;5. The nature and cause of such excess emissions;6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction;7. The steps taken to limit the excess emissions; and,8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.

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PART 4 - FACILITY WIDE GENERAL REQUIREMENTS

This part describes conditions and provisions applicable facility wide. Specific source category conditions and requirements are contained in Part 5 of this permit.

Condition Number	Condition
4.2	Air dispersion modeling analysis or other information has demonstrated that emissions from this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air quality standard. Any changes in the parameters used in the air dispersion modeling may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment A of this permit. Higher emission rates may be administratively incorporated into Attachment A of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded. This is a State Only enforceable requirement.
4.3	The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment A, not to exceed the pollutant limitations of this conditional major operating permit. Should the facility wish to increase the emission rates listed in Attachment A, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified in condition 4.2. This is a State Only enforceable requirement.

PART 5 - EMISSION UNIT REQUIREMENTS

PART 5.A - EMISSION UNIT DESCRIPTION

Emission Unit ID	Emission Unit Description	Control Device ID	Control Device Type (Generic Description)
01	Boiler A	N/A	
02	Boiler B	N/A	
03	Sodium Chlorate Production Process, Conveying and Storage	CD-9	Air Exhaust Packed-Bed Caustic Scrubber
		CDs-11,12,13 & 14	Packed-Bed Caustic Hydrogen Scrubbers
		CD-25	Three-Stage Impingement Dryer A Dust Scrubber
		CD-26	Three-Stage Impingement Dryer B Dust Scrubber
		CD-28	Three-Stage Impingement Silo Dust Scrubber
		CD-29	Three-Stage Impingement Loading Dust Scrubber
04	No. 2 Fuel Oil Storage Tank (Moved to Exempt Sources)	N/A	N/A

PART 5.B - GENERIC EMISSION UNIT CONDITIONS

Condition Number	Emission Unit ID	Equipment/ Control Device ID	Condition
5.B.1	All	All	In accordance with S.C. Regulation 61-62.1, Section II(J), a copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. A permittee shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods, at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least five (5) years and shall be made available to a Department representative upon request.
5.B.2	03	5/CD-9, 7/CD-9, 8/CD-9, 10/CD-11, 20/CD-12, 30/CD-13, 40/CD-14, 23/CD-25, 24/CD-26, 27/CD-28, W270/CD-29	The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel.
5.B.3	03	5/CD-9, 7/CD-9, 8/CD-9, 10/CD-11, 20/CD-12, 30/CD-13, 40/CD-14, 23/CD-25, 24/CD-26, 27/CD-28, W270/CD-29	All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e., pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period then a letter shall indicate such. Any alternative method for monitoring control device performance must be preapproved by the Bureau and shall be incorporated into the permit as set forth in SC Regulation 61-62.1 Section II.

PART 5.B - GENERIC EMISSION UNIT CONDITIONS

Condition Number	Emission Unit ID	Equipment/Control Device ID	Condition
5.B.4	01 02	32 33	<p>Per S.C. Regulation 61-62.5, Standard 5.2, Section I(a)(2) and Section IV, for any existing source where a burner assembly is replaced after June 25, 2004, regardless of size or age of the burner assembly to be replaced, the burner assembly shall be replaced with a low NO_x burner assembly or equivalent technology capable of achieving a 30 percent reduction from uncontrolled NO_x emission levels based upon manufacturer's specifications. An exemption from this requirement shall be granted when a single burner assembly is being replaced in a source with multiple burners due to non-routine maintenance. The owner or operator shall notify and register the replacement with the Department in accordance with S.C. Regulation 61-62.5, Standard 5.2, Section V and listed below. The replacement of individual components such as burner heads, nozzles, or windboxes does not trigger the applicability of this regulation.</p> <ul style="list-style-type: none"> • When an existing burner assembly is replaced, the owner or operator shall notify and register the replacement with the Department using the appropriate low NO_x burner replacement notification form and submit the form to the Director of Engineering Services within 7 days of replacing an existing burner assembly. • Owners/operators shall perform tune-ups every two years in accordance with manufacturer's specifications or with good engineering practices. All tune-up records are required to be maintained on site. The facility shall develop and retain a tune-up plan on file.

PART 5.C - EMISSION UNIT - LIMITATIONS, MONITORING AND REPORTING

PART 5.C.01a - - EQUIPMENT FOR EMISSION UNIT 01- Boiler A

Equipment ID	Equipment Description	Installation Date/Modification Date	Control Device ID	Emission Point ID
32	49.4 million Btu/hr No. 2 Fuel Oil Fired Boiler	1998	N/A	Boiler A

PART 5.C.01c - CONTROL DEVICE(S) FOR EMISSION UNIT 01- Boiler A

Control Device ID	Control Device Description	Installation Date/Modification Date	Pollutant(s) Controlled
	N/A		

PART 5.C.01c - CONDITIONS FOR EMISSION UNIT 01- Boiler A

Condition Number	Equipment /Control Device ID	Regulated Pollutant/ Standard	Conditions
01.1	32	Opacity	<p>Limits/Standards: Boiler A must demonstrate compliance with requirements A and B and associated record keeping as detailed below:</p> <p>A. In accordance with S.C. Regulation 61-62.5, Standard No. 1, Section I (B), sources constructed on or after February 11, 1971 shall not discharge into the ambient air smoke which exceeds opacity of 20%. The 20% opacity limit may be exceeded for soot blowing, but may not be exceeded for more than 6 minutes in a one hour period nor be exceeded for more than a total of 24 minutes in a 24 hour period. Emissions caused by soot blowing shall not exceed 60%. This opacity standard does not apply during startup and shutdown.</p> <p>B. In accordance with 40 CFR 60.43c(c), these sources shall not discharge into the ambient air smoke which exceeds an opacity of 20% except for one six-minute period per hour of not more than 27% opacity. This opacity standard does not apply during startup, shutdown, and malfunction.</p> <p>State Only: No</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: The opacity standards set forth above do not apply during startup or shutdown. The owner/operator shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. The owner/operator shall maintain a log of the time, duration, and any other pertinent information to determine periods of startup and shutdown and make these records available to a Department representative upon request.</p>
01.2	32	PM	<p>Limits/Standards: In accordance with SC Regulation 61-62.5, Standard No. 1 - Emissions from Fuel Burning Operations, Section II - Particulate Matter Emissions, the allowable discharge of particulate matter resulting from the fuel burning operations is 0.6 pounds per million BTU input.</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: The owner/operator shall maintain a log of the time, magnitude, duration and any other pertinent information to determine periods of startup and shutdown and make these records available to a Department representative upon request.</p>

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PART 5.C.01c - CONDITIONS FOR EMISSION UNIT 01- Boiler A

Condition Number	Equipment /Control Device ID	Regulated Pollutant/ Standard	Conditions
01.3	32	SO ₂	<p>Limits/Standards: In accordance with SC Regulation 61-62.5, Standard No. 1 - Emissions from Fuel Burning Operations, Section III - Sulfur Dioxide Emissions, the maximum allowable discharge of sulfur dioxide (SO₂) resulting from the fuel burning operations is 3.5 pounds per million BTU input.</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: Fuel oil sulfur content shall be less than or equal to 0.05% by weight. Fuel oil supplier certification shall be obtained for each batch of oil received and stored on site.</p>
01.4	32	SO ₂ §60.42c	<p>Limits/Standards: New Source Performance Standard (NSPS §60), Subpart A, General Conditions and Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units, for which Construction, Reconstruction or Modification Commenced after June 9, 1989, applies to these boilers. The permittee shall comply with all applicable parts of §60 Subpart A and §60.40 Subpart Dc.</p> <p>In accordance with §60.42c(d), no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur.</p> <p>State Only: No</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: The owner/operator shall record and maintain records of the amounts and types of each fuel combusted by Boiler A. The amount and type of fuel combusted shall be recorded monthly.</p> <p>Compliance with the fuel sulfur limit shall be determined based on certification from the fuel supplier as specified in §60.48c(f). Records of these certifications shall be kept on site. Reports shall be submitted semi-annually. The reports shall consist of the fuel certification records and a signed statement from the owner/operator that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.</p>

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PART 5.C.01c - CONDITIONS FOR EMISSION UNIT 01- Boiler A

Condition Number	Equipment /Control Device ID	Regulated Pollutant/ Standard	Conditions														
01.5	32	Fuel	<p>Limits/Standards: In accordance with SC Regulation 61-62.1, Section II.E, to avoid being a major source for Prevention of Significant Deterioration (PSD), this facility has accepted a restriction to burn only by-product hydrogen gas and #2 Fuel Oil with maximum sulfur content of 0.05% as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p> <p>State Only: No</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: Fuel oil supplier certification shall be obtained for each batch of oil received and stored on site. The owner/operator shall record daily fuel usage of all fuels combusting in this source. Records of fuel oil certification and fuel usage shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request. Summary semi-annual reports including any variances (if there are no variances, state so in the report) from established parameters shall be submitted.</p>														
01.6	32	HAPs	<p>Limits/Standards: In accordance with SC Regulation 61-62.5, Standard No. 3, Waste Combustion and Reduction, Hydrogen Chloride, Nickel, Cadmium, Chromium, Arsenic, and/or Lead emissions from this source shall not exceed those limits shown in the following Table:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Pollutant</th> <th>Limit (lb/million Btu total heat input)</th> </tr> </thead> <tbody> <tr> <td>HCl</td> <td>0.45</td> </tr> <tr> <td>Nickel (Ni)</td> <td>6.0E-3</td> </tr> <tr> <td>Cadmium (Cd)</td> <td>1.0E-4</td> </tr> <tr> <td>Chromium (Cr)</td> <td>5.0E-4</td> </tr> <tr> <td>Arsenic (As)</td> <td>2.5E-4</td> </tr> <tr> <td>Lead (Pb)</td> <td>5.0E-3</td> </tr> </tbody> </table> <p>State Only: No</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: Not required.</p>	Pollutant	Limit (lb/million Btu total heat input)	HCl	0.45	Nickel (Ni)	6.0E-3	Cadmium (Cd)	1.0E-4	Chromium (Cr)	5.0E-4	Arsenic (As)	2.5E-4	Lead (Pb)	5.0E-3
Pollutant	Limit (lb/million Btu total heat input)																
HCl	0.45																
Nickel (Ni)	6.0E-3																
Cadmium (Cd)	1.0E-4																
Chromium (Cr)	5.0E-4																
Arsenic (As)	2.5E-4																
Lead (Pb)	5.0E-3																

PART 5.C.02a - - EQUIPMENT FOR EMISSION UNIT 01- Boiler B

Equipment ID	Equipment Description	Installation Date/Modification Date	Control Device ID	Emission Point ID
33	49.4 million Btu/hr No. 2 Fuel Oil Fired Boiler	1998	N/A	Boiler B

PART 5.C.02b - CONTROL DEVICE(S) FOR EMISSION UNIT 02 – Boiler B

Control Device ID	Control Device Description	Installation Date/Modification Date	Pollutant(s) Controlled
	N/A		

PART 5.C.02 c - CONDITIONS FOR EMISSION UNIT 02 – Boiler B

Condition Number	Equipment /Control Device ID	Regulated Pollutant/ Standard	Conditions
02.1	33	Opacity	<p>Limits/Standards: Boiler B must demonstrate compliance with requirements A and B and associated record keeping as detailed below:</p> <p>A. In accordance with S.C. Regulation 61-62.5, Standard No. 1, Section I (B), sources constructed on or after February 11, 1971 shall not discharge into the ambient air smoke which exceeds opacity of 20%. The 20% opacity limit may be exceeded for soot blowing, but may not be exceeded for more than 6 minutes in a one hour period nor be exceeded for more than a total of 24 minutes in a 24 hour period. Emissions caused by soot blowing shall not exceed 60%. This opacity standard does not apply during startup and shutdown.</p> <p>B. In accordance with 40 CFR 60.43c(c), these sources shall not discharge into the ambient air smoke which exceeds an opacity of 20% except for one six-minute period per hour of not more than 27% opacity. This opacity standard does not apply during startup, shutdown, and malfunction.</p> <p>State Only: No</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: The opacity standards set forth above do not apply during startup or shutdown. The owner/operator shall, to the extent practicable, maintain and operate any source including associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions. The owner/operator shall maintain a log of the time, duration, and any other pertinent information to determine periods of startup and shutdown and make these records available to a Department representative upon request.</p>
02.2	33	PM	<p>Limits/Standards: In accordance with SC Regulation 61-62.5, Standard No. 1 - Emissions from Fuel Burning Operations, Section II - Particulate Matter Emissions, the allowable discharge of particulate matter resulting from the fuel burning operations is 0.6 pounds per million BTU input.</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other The owner/operator shall maintain a log of the time, magnitude, duration and any other pertinent information to determine periods of startup and shutdown and make these records available to a Department representative upon request.</p>

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PART 5.C.02 c - CONDITIONS FOR EMISSION UNIT 02 – Boiler B

Condition Number	Equipment /Control Device ID	Regulated Pollutant/ Standard	Conditions
02.3	33	SO ₂	<p>Limits/Standards: In accordance with SC Regulation 61-62.5, Standard No. 1 - Emissions from Fuel Burning Operations, Section III - Sulfur Dioxide Emissions, the maximum allowable discharge of sulfur dioxide (SO₂) resulting from the fuel burning operations is 3.5 pounds per million BTU input.</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: Fuel oil sulfur content shall be less than or equal to 0.05% by weight. Fuel oil supplier certification shall be obtained for each batch of oil received and stored on site.</p>
02.4	33	SO ₂ §60.42c	<p>Limits/Standards: New Source Performance Standard (NSPS §60), Subpart A, General Conditions and Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units, for which Construction, Reconstruction or Modification Commenced after June 9, 1989, applies to these boilers. The permittee shall comply with all applicable parts of §60 Subpart A and §60.40 Subpart Dc.</p> <p>In accordance with §60.42c(d), no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur.</p> <p>State Only: No</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: The owner/operator shall record and maintain records of the amounts and types of each fuel combusted by Boiler B. The amount and type of fuel combusted shall be recorded monthly.</p> <p>Compliance with the fuel sulfur limit shall be determined based on certification from the fuel supplier as specified in §60.48c(f). Records of these certifications shall be kept on site. Reports shall be submitted semi-annually. The reports shall consist of the fuel certification records and a signed statement from the owner/operator that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.</p>

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PART 5.C.02 c - CONDITIONS FOR EMISSION UNIT 02 – Boiler B

Condition Number	Equipment /Control Device ID	Regulated Pollutant/Standard	Conditions														
02.5	33	Fuel	<p>Limits/Standards: In accordance with SC Regulation 61-62.1, Section II.E, to avoid being a major source for Prevention of Significant Deterioration (PSD), this facility has accepted a restriction to burn only by-product hydrogen gas and #2 Fuel Oil with maximum sulfur content of 0.05% as fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.</p> <p>State Only: No</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: Fuel oil supplier certification shall be obtained for each batch of oil received and stored on site. The owner/operator shall record daily fuel usage of all fuels combusting in this source. Records of fuel oil certification and fuel usage shall be maintained on site for a period of at least five (5) years from the date generated and shall be made available to a Department representative upon request. Summary semi-annual reports including any variances (if there are no variances, state so in the report) from established parameters shall be submitted.</p>														
02.6	33	HAPs	<p>Limits/Standards: In accordance with SC Regulation 61-62.5, Standard No. 3, Waste Combustion and Reduction, Hydrogen Chloride, Nickel, Cadmium, Chromium, Arsenic, and/or Lead emissions from this source shall not exceed those limits shown in the following Table:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Pollutant</th> <th>Limit (lb/million Btu total heat input)</th> </tr> </thead> <tbody> <tr> <td>HCl</td> <td>0.45</td> </tr> <tr> <td>Nickel (Ni)</td> <td>6.0E-3</td> </tr> <tr> <td>Cadmium (Cd)</td> <td>1.0E-4</td> </tr> <tr> <td>Chromium (Cr)</td> <td>5.0E-4</td> </tr> <tr> <td>Arsenic (As)</td> <td>2.5E-4</td> </tr> <tr> <td>Lead (Pb)</td> <td>5.0E-3</td> </tr> </tbody> </table> <p>State Only: No</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: Not required.</p>	Pollutant	Limit (lb/million Btu total heat input)	HCl	0.45	Nickel (Ni)	6.0E-3	Cadmium (Cd)	1.0E-4	Chromium (Cr)	5.0E-4	Arsenic (As)	2.5E-4	Lead (Pb)	5.0E-3
Pollutant	Limit (lb/million Btu total heat input)																
HCl	0.45																
Nickel (Ni)	6.0E-3																
Cadmium (Cd)	1.0E-4																
Chromium (Cr)	5.0E-4																
Arsenic (As)	2.5E-4																
Lead (Pb)	5.0E-3																

PART 5.C.03a - EQUIPMENT FOR EMISSION UNIT ID 03 – Sodium Chlorate Production Process, Storage, and Conveying

Equipment ID	Equipment Description	Installation Date/Modification Date	Control Device ID	Emission Point ID
5	Dehypo System	1998	CD-9	9
7	28,800-gallon HCl Storage Tank	1998	CD-9	9
8	4,200-gallon HCl Dilution Tank	1998	CD-9	9

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PART 5.C.03a - EQUIPMENT FOR EMISSION UNIT ID 03 – Sodium Chlorate Production Process, Storage, and Conveying

Equipment ID	Equipment Description	Installation Date/Modification Date	Control Device ID	Emission Point ID
10	Sodium Chlorate Production Line 10 – consisting of eight (8) – 7600-gallon chlorate mixture process tanks (C11-C19)	1998	CD-11	11
20	Sodium Chlorate Production Line 20 – consisting of eight (8) – 7600-gallon chlorate mixture process tanks (C21-C29) and one 6300-gallon chlorate mixture receiving tank (T188) (this tank is shared with Sodium Chlorate Production Line 10)	1998	CD-12	12
30	Sodium Chlorate Production Line 30 – consisting of eight (8) – 7600-gallon chlorate mixture process tanks (C31-C39)	1998	CD-13	13
40	Sodium Chlorate Production Line 40 – consisting of eight (8) – 7600-gallon chlorate mixture process tanks (C41-C49) and one 6300-gallon chlorate mixture receiving tank (T190) (this tank is shared with Sodium Chlorate Production Line 30)	1998	CD-14	14
23	7.0 ton/hr Fluidized Bed Dryer A and Crystallizer	1998	CD-25	125
24	7.0 ton/hr Fluidized Bed Dryer B and Crystallizer	1998	CD-26	126
27	Sodium Chlorate Crystal Pneumatic Conveying Systems and Two Storage Silos	1998	CD-28	28
W270	Sodium Chlorate Crystal Screw Conveying and Rail Car Loading System	1998	CD-29	129

PART 5.C.03 b - CONTROL DEVICE(S) FOR EMISSION UNIT ID 03 – Sodium Chlorate Production Process, Storage, and Conveying

Control Device ID	Control Device Description	Installation Date/Modification Date	Pollutant(s) Controlled
CD-9	Air Exhaust Packed-Bed Caustic Scrubber	1998	HCL, Cl ₂
CD-11	Packed-Bed Caustic Hydrogen Scrubber	1998	Cl ₂
CD-12	Packed-Bed Caustic Hydrogen Scrubber	1998	Cl ₂
CD-13	Packed-Bed Caustic Hydrogen Scrubber	1998	Cl ₂
CD-14	Packed-Bed Caustic Hydrogen Scrubber	1998	Cl ₂
CD-25	Three-Stage Impingement Dryer A Dust Scrubber	1998	PM, PM10, PM2.5
CD-26	Three-Stage Impingement Dryer B Dust Scrubber	1998	PM, PM10, PM2.5
CD-28	Three-Stage Impingement Silo Dust Scrubber	1998	PM, PM10, PM2.5
CD-29	Three-Stage Impingement Loading Dust Scrubber	1998	PM, PM10, PM2.5

PART 5.C.03c - CONDITIONS FOR EMISSION UNIT ID 03 – Sodium Chlorate Production Process, Storage, and Conveying

Condition Number	Equipment/Control Device ID	Regulated Pollutant/Standard	Conditions
03.1	5/CD-9, 7/CD-9, 8/CD-9, 10/CD-11, 20/CD-12, 30/CD-13, 40/CD-14, 23/CD-25, 24/CD-26, 27/CD-28, W270/CD-29	Opacity	<p>Limits/Standards: In accordance with SC Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section IX - Visible Emissions (Where Not Specified Elsewhere), where construction or modification began after December 31, 1985, emissions (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p> <p>Testing: Not Required</p> <p>Monitoring/Record Keeping/Reporting/Other: Not Required</p>

PART 5.C.03c - CONDITIONS FOR EMISSION UNIT ID 03 – Sodium Chlorate Production Process, Storage, and Conveying

Condition Number	Equipment/Control Device ID	Regulated Pollutant/Standard	Conditions				
03.2	23/CD-25, 24/CD-26, 27/CD-28, W270/CD-29	PM	<p>Limits/Standards: In accordance with S.C. Regulation 61-62.5, Standard No. 4 - Emissions from Process Industries, Section VIII - Other Manufacturing, particulate matter emissions from a process shall be limited to the rate specified by use of the following equations:</p> <p>1) when process weight rates are less than or equal to 30 tons per hour:</p> $E = 4.10P^{0.67}$ <p align="center">or</p> <p>2) when process weight rates are greater than 30 tons per hour</p> $E = 55.0P^{0.11} - 40$ <p>where E = the allowable emission rate in pounds per hour and P = process weight rate in tons per hour</p> <p>For the purposes of compliance with this condition, the process boundaries are defined as follows:</p> <table border="1" data-bbox="570 1014 1490 1081"> <thead> <tr> <th>Process</th> <th>Equipment ID's</th> </tr> </thead> <tbody> <tr> <td align="center">03</td> <td align="center">All</td> </tr> </tbody> </table> <p>State Only: No</p> <p>Testing: Not required</p> <p>Monitoring/Record Keeping/Reporting/Other: The owner/operator shall continue to operate and maintain liquid flow meters on each scrubber module and a density measurement device common to the dust scrubbers. Each parameter shall be recorded each shift during source operation. Scrubber monitoring data shall be maintained on site and shall be made available to Department personnel upon request.</p> <p>Operational ranges for the monitored parameters have been established to provide a reasonable assurance of compliance. These operational ranges for the monitored parameters were derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment in compliance. The facility shall maintain previously established operational ranges for these monitored parameters. The operating ranges may be updated using this procedure, following submittal to the Department.</p>	Process	Equipment ID's	03	All
Process	Equipment ID's						
03	All						

PART 5.D. - CONDITIONS FOR FACILITY WIDE - LIMITATIONS, MONITORING AND REPORTING

Condition Number	Regulated Pollutant/ Standard	Conditions
5.D.1	PM PM ₁₀ PM _{2.5}	<p>Limits/Standards: In accordance with SC Regulation 61-62.1, Section II.E, to avoid being a major source for Prevention of Significant Deterioration (PSD), the facility has a Federally enforceable operating limitation to reduce its potential to emit to less than 100 tons per year of PM, PM₁₀, and PM_{2.5} as defined by SC Regulation 61-62.5, Standard No. 7, Prevention of Significant Deterioration (PSD).</p> <p>In accordance with SC Regulation 61-62.1, Section II.G, to avoid being a major source, the facility has a Federally enforceable operating limitation to reduce its potential to emit to less than 100 tons per year of PM₁₀, and PM_{2.5}, as defined by SC Regulation 61-62.70.2.(r)(2)-Title V Operating Permit Program.</p> <p>State Only: No</p> <p>Testing: Not required</p> <p>Monitoring/Record Keeping/Reporting/Other: In order to comply with this limitation the owner/operator shall not operate without all control devices online and operating at all times of process equipment operating. Bureau approval must be obtained before the facility may increase emissions of these pollutants over the existing permitted limits.</p>

PART 5.D. - CONDITIONS FOR FACILITY WIDE - LIMITATIONS, MONITORING AND REPORTING

Condition Number	Regulated Pollutant/ Standard	Conditions
5.D.2	HAPs	<p>Limits/Standards: FinnChem USA Inc. (1900-0206) and FinnChem USA Inc. (1900-0172) have been determined to be co-located facilities for Title V applicability purposes. In accordance with South Carolina Regulation 61-62.1, Sec II(G), the facility has agreed to federally enforceable operating limits to limit potential to emit to less than 10 tons per year for each individual hazardous air pollutant and 25 tons per year combined HAPs, as defined by SC Regulation 61-62.70.2.(r)(2)-Title V Operating Permit Program. Yearly totals are calculated as a twelve month rolling sum.</p> <p>State Only: No</p> <p>Testing: Not required</p> <p>Monitoring/Record Keeping/Reporting/Other:</p> <p>The following two requirements shall be used to comply with this limit:</p> <ol style="list-style-type: none"> 1. The owner/operator shall maintain consumption records of all process-related materials containing hazardous air pollutants (HAP). These records shall include the total amount of each material used, and the HAP content in percent by weight. HAP emissions shall be calculated on a quarterly basis, and a twelve-month rolling sum shall be calculated for total HAP emissions. The twelve-month rolling sum shall be less than 10 tons per year of a single HAP or 25 tons per year of an aggregate of HAPs. The owner/operator shall maintain all records, including material purchase orders, invoices, and material data sheets, etc. for a period of at least five (5) years from the date generated, and shall make these records available to Department personnel upon request. Semiannual reports including all recorded parameters and calculated values shall be submitted to the Bureau. An algorithm, including example calculations and emission factors, explaining the method used to determine HAP rates shall be included in the initial report. Subsequent submittals of the algorithm and example calculations are unnecessary, unless the method of calculation is found to be unacceptable by the Bureau or if the facility changes the method of calculating emissions and/or changes emission factors. 2. The owner/operator shall continue to operate, and maintain pressure drop indicators and pH meters on each scrubber module of the Air Exhaust Packed –Bed Caustic Scrubber CD9, and Packed- Bed caustic hydrogen Scrubbers CD11 through CD14, as described in Condition 03.3 of this permit. The scrubbers shall be in place and operational whenever processes controlled by the scrubbers are running, except during periods of scrubber malfunction or mechanical failure. Monitoring parameter readings (i.e., pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Monitoring data shall be maintained on site and shall be made available to Department personnel upon request. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period then a letter shall indicate such.

PART 6 - ADDITIONAL CONDITIONS

PART 6.A - OPERATIONAL FLEXIBILITY

Condition Number	Conditions
D.1	<p>The following activities shall be allowed, without a construction permit, or without revising or reopening the operating permit unless otherwise specified by any State or Federal requirement. This flexibility does not relieve the owner/operator of any source from any obligation to comply with any applicable requirements. The owner/operator may be subject to possible enforcement if the activity is found to be inconsistent with the permit flexibility conditions.</p> <p>Criteria:</p> <ol style="list-style-type: none"> 1. The activity will not result in emissions that will exceed any limit in this permit. 2. The activity does not result in a change in a permit term, condition or limit. 3. The activity will not result in emissions that exceed the facility's potential to emit. 4. The activity does not meet the definition of new source, modification or reconstruction under 40 CFR Part 60, 61 or 63. Exceptions to this are sources that are exempt per S.C. Regulation 61-62.1 Section II or the BAQ published exempt activities list. For existing sources subject to 40 CFR Part 63, per 63.9(j), any change in the notification information already provided (such as the notification of compliance status) shall be submitted in writing within 15 calendar days after the change. 5. Compliance with S.C. Regulation 61-62.5 Standards No. 2 (Ambient Air Quality Standards), No. 7 (PSD) and No. 8 (Toxic Air Pollutants) is not affected. <p>Allowed Activities:</p> <ol style="list-style-type: none"> 1. Any activity exempted in S.C. Regulation 61-62.1, Section II or the BAQ published exempt activities list. Case by case exemptions described in Section II will require prior written approval. 2. Replacement of process equipment such as reactors, storage tanks, etc. with equipment identical in capacity, dimensions, and characteristics or with equipment that will have the same or lower emissions. 3. Manufacture of new products in existing equipment. 4. Changes in product formulation in existing equipment. 5. Additions of new raw material and changes in raw material usage or formulation including paints and other coatings that do not necessitate construction or modification to existing equipment. 6. Addition of control devices for the purpose of hygiene, safety, or other non-creditable decreases in emissions. 7. Re-routing of stacks or any change in stack parameters (i.e. stack height, orientation, diameter, removal or addition of rain caps) as long as they do not impact modeled stack parameters. 8. Changes in the sequence of process operations. 9. Change in the method of raw material addition. 10. Change in the method of product packaging. 11. Operational changes in the physical dimensions, layout, configuration, arrangement or locations of process equipment to accommodate production needs as long as it does not affect air emissions or impact modeled stack parameters. 12. Changes in the supplier of raw materials, fuels, or paints and other coatings that do not necessitate construction or modification to existing equipment. 13. Change in operating parameters as long as they do not quantitatively affect air emissions. 14. Portable equipment such as generators, compressors, and other diesel-driven portable units for emergency, overhaul, maintenance, or similar activities that will have a duration of twelve months or less. 15. The facility may emit air toxics or criteria pollutants previously modeled at levels different than those listed in Attachment A or emit a new air toxic from existing equipment without prior written approval of the new modeled emission rate. 16. Other activities as allowed by BAQ developed exemption guidance. <p>Modeling:</p>

PART 6 - ADDITIONAL CONDITIONS

PART 6.A - OPERATIONAL FLEXIBILITY

Condition Number	Conditions
	<p>Changes that impact an air dispersion modeling demonstration, but otherwise are allowed under the criteria in this condition, shall be allowed provided:</p> <ol style="list-style-type: none"> Updated air dispersion modeling is conducted prior to the source operating under the new operating scenario. The modeling results for the new operating scenario are kept on site and available for inspection. The facility must submit a written request to modify the modeling demonstration within 3 business days of operating under the new operating scenario. The modeling demonstration shall include a description of the scenario, emission rates, modeling results, and modeling files. <p>Recordkeeping: As part of this permit flexibility procedure, the facility shall keep an on-site implementation log (OSIL) to document all changes made under the procedure. The OSIL will be kept with the facility's air permit. The OSIL shall provide detailed information supporting the changes made under this procedure. At a minimum all of the following items shall be included in the OSIL:</p> <ol style="list-style-type: none"> A brief description of the activity and how it relates to the above pre-approved changes. Include impacted equipment identification numbers, operating permit identification unit, stack identification. The date the activity occurred. A demonstration that the activity did not trigger any new regulations, standards or requirements. A demonstration that the activity did not result in a change in a permit term, condition or limit. Emissions calculations for all regulated air pollutants resulting from the activity and demonstration that when added to the existing emissions all permit limits will be met. This should include the increase and the facility-wide emissions totals from the activity. <p>Reporting: If activities are undertaken using this permit flexibility condition, the OSIL changes shall be submitted annually (end of the calendar year) to the Director of the Engineering Services.</p>

PART 6.B - OTHER

Condition Number	Conditions
6.B.1	Fugitive Particulate (PM) emissions from material handling, process equipment, control equipment, or storage piles will be minimized to the maximum extent possible. This will include proper maintenance of the control system such as scheduled cyclone and ductwork inspections, replacement of damaged or worn sheet metal, etc. Fugitive emissions from dust buildup will be controlled by proper housekeeping and/or wet suppression.
6.B.2	Boilers A & B are permitted to burn only byproduct hydrogen gas as a primary fuel with No. 2 fuel oil (sulfur content <0.05 wt.%) serving as a back-up fuel. The use of any other substances as fuel is prohibited without prior written approval from the Bureau of Air Quality.

N/A = Not Applicable

PART 7 - NESHAP REQUIREMENTS

PART 7.A - NESHAP PERIODIC REPORTING SCHEDULE SUMMARY

NESHAP Part	NESHAP Subpart	Compliance Monitoring Report Submittal Frequency	Reporting Period	Report Due Date
63	ZZZZ	Semi-Annual	Jan 1-June 30 & July 1-December 31	July 31 & January 31

Note:

1. This table summarizes only the periodic compliance reporting schedule. Additional reports may be required. See specific NESHAP Subpart for additional reporting requirements and associated schedule.
2. This reporting schedule does not supersede any other reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and/or 40 CFR Part 63.

PART 7.B - NESHAP - GENERAL REQUIREMENTS

Condition Number	Condition
7.B.1	All NESHAP notifications and reports shall be sent to the South Carolina Department of Health and Environmental Control - Bureau of Air Quality (SCDHEC - BAQ) at the following address: SCDHEC - BAQ Air Toxics Section 2600 Bull Street Columbia, SC 29201
7.B.2	All NESHAP notifications and the cover letter to periodic reports shall be sent to the United States Environmental Protection Agency (US EPA) at the following address: US EPA, Region 4 Air, Pesticides and Toxics Management Division 61 Forsyth Street Atlanta, GA 30303

PART 7.C - NESHAP PART 63 SUBPART ZZZZ - AFFECTED SOURCES

SUBPART ZZZZ - National Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engine

Emission Unit ID	Equipment ID	Affected Source Description	MACT Control Device	Non-MACT Control Device
IA	F	235-horsepower (hp) four-stroke spark ignition (SI) engine	N/A	N/A

Part 7.C lists the affected sources as identified in the facility's Notice of Compliance Status and the permit application.
N/A = Not Applicable

PART 7.C - NESHAP PART 63 SUBPART ZZZZ - AFFECTED SOURCES

SUBPART ZZZZ - National Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engine

Condition Number	Emission Unit ID	Equipment/Control Device ID	Condition
7.C.1	IA	F	This facility is subject to the provisions of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subpart ZZZZ. Existing affected sources shall comply with the applicable provisions by the compliance date specified in Subpart ZZZZ. Any new affected sources shall comply with the requirements of these Subparts upon initial start-up unless otherwise noted.

PART 8 - REPORTING REQUIREMENTS

PART 8.A - PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
Quarterly	January-March April-June July-September October-December	April 30 July 30 October 30 January 30
Semiannual	January-June April-September July-December October-March	July 30 October 30 January 30 April 30
Annual	January-December April-March July-June October-September	January 30 April 30 July 30 October 30

Note: This reporting schedule does not supersede any federal reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. All federal reports must meet the reporting time frames specified in the federal standard unless the Department or EPA approves a change.

PART 8.B - REPORTING CONDITIONS

Condition Number	Condition
8.B.1	Reporting required in this permit, shall be submitted in a timely manner as directed in Part 8.A of this permit.
8.B.2	Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality, at the address listed below. SCDHEC - BAQ Technical Management Section 2600 Bull Street Columbia, SC 29201

ATTACHMENT A

Modeled Emission Rates

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The emission rates listed herein are not considered federally enforceable limitations but are used to evaluate ambient air quality impact. Until the Department makes a determination that a facility is causing or contributing to an exceedance of a state or federal ambient air quality standard, increases to these emission rates are not in themselves considered violations of these ambient air quality standards (see conditions 4.2 and 4.3).

STANDARD NO. 2 - MODELED AAQS EMISSION RATES (LBS/HR)							
STACK ID	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	Lead	HF
Boiler A	Exempt	Exempt	2.49	7.01	1.80	Exempt	Exempt
Boiler B	Exempt	Exempt	2.49	7.01	1.80	Exempt	Exempt
FACILITY TOTAL	--	--	4.98	14.02	3.60	--	--
All criteria pollutant emissions come from the Plant Facility 1900-0172. 7/2013 summary							

STANDARD NO. 2 and 7 - EXEMPTED AAQS EMISSION RATES (LBS/HR)							
STACK ID	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	Lead	HF
Boiler A	0.81	0.54	--	--	--	--	--
Boiler B	0.81	0.54	--	--	--	--	--
#25 – Dryer A Dust Scrubber	0.32	0.32	--	--	--	--	--
#26 – Dryer B Dust Scrubber	0.32	0.32	--	--	--	--	--
#28 – Silo Dust Scrubber	0.043	0.043	--	--	--	--	--
#29 – Loading Dust Scrubber	0.063	0.063	--	--	--	--	--
FACILITY TOTAL	2.366	1.826	--	--	--	--	--

STANDARD NO. 7 - MODELED PSD CLASS II INCREMENT EMISSION RATES (LBS/HR)				
STACK ID	Minor Source Baseline Dates			
	5/20/1981	N/A	5/20/1981	10/26/1988
	PM ₁₀	PM _{2.5}	SO ₂	NO _x
Boiler A	Exempt	--	2.49	7.01
Boiler B	Exempt	--	2.49	7.01
FACILITY TOTAL	--	--	4.98	14.02
All criteria pollutant emissions come from the Plant Facility 1900-0172. 7/2013 summary				

STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES (LBS/HR)			
STACK ID	Chlorine	Hydrogen Chloride	
	7782-50-5	7647-01-0	
PLANT FACILITY 1900-0172			
Boiler A	--	0.177	

ATTACHMENT A

Modeled Emission Rates

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STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES (LBS/HR)				
STACK ID	Chlorine	Hydrogen Chloride		
	7782-50-5	7647-01-0		
Boiler B	--	0.177		
#9 - Air Exhaust Scrubber	0.0028 (0.0026)	0.0012		
#11 - Hydrogen Scrubber / Line 10	0.062 (0.058)	--		
#12 - Hydrogen Scrubber / Line 20	0.062 (0.058)	--		
#13 - Hydrogen Scrubber / Line 30	0.062 (0.058)	--		
#14 - Hydrogen Scrubber / Line 40	0.062 (0.058)	--		
SHOP FACILITY 1900-0206				
#128, #129- Electric Curing Oven , 0.50MMBtu/Hr	--	0.734		
#132-Etch Tank	--	0.22		
TOTAL-BOTH FACILITIES	0.2508 (0.23)	1.31		
The current emission rates for Chlorine are listed in parentheses. The previous rates were used to calculate the modeled concentrations. The previous rates will be retained until modeling is updated. 8/2013				

ATTACHMENT B

Exempt Sources

Finnchem USA Inc.

CM-1900-0172

PAGE 1 OF 2

The following table contains a list of sources which are considered exempt from the requirements to obtain a construction permit pursuant to South Carolina Regulation 61-62.1, Section II(B). Sources listed below are not exempt from any otherwise applicable state or federal requirements including, but not limited to, opacity standards, ambient air quality standards, and air toxic standards.

EXEMPT SOURCES			
Equipment ID	Source Description	Installation Date	Basis
T180	100,000-gallon saturated NaCl brine storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T140	100,000-gallon saturated NaCl brine storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T144	12,000-gallon saturated NaCl brine storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T146	12,000-gallon saturated NaCl brine storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T158	635-gallon saturated NaCl brine storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T149	2750-gallon saturated NaCl brine storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T163	9500-gallon saturated NaCl brine storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T321	700-gallon saturated NaCl brine storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T339	700-gallon saturated NaCl brine storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T358	24,000-gallon 50% NaOH storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T361	4200-gallon 12% NaOH storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T369	7000-gallon 50% Hydrogen Peroxide storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T364	9500-gallon storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T373	500 gallon 15% Sodium Thiosulfate storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T184	16,500 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T195	16,500 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T196	16,500 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T198	16,500 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T199	16,500 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T200	16,500 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(f)
T201	16,500 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T293	4000 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T297	4000 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T303	4000 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T307	4000 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T287	24,000 gallon aqueous Chlorate storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T288	24,000 gallon aqueous Chlorate storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T289	24,000 gallon aqueous Chlorate storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T260	13,000 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T261	13,000 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T262	13,000 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T396	25,000 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T483	25,000 gallon Chlorate mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)

ATTACHMENT B**Exempt Sources****Finnchem USA Inc.****CM-1900-0172****PAGE 2 OF 2**

EXEMPT SOURCES			
Equipment ID	Source Description	Installation Date	Basis
T121	70,022-gallon NaCl Brine Pit	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T122	70,022-gallon NaCl Brine Pit	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T126	70,022-gallon NaCl Brine Pit	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T127	70,022-gallon NaCl Brine Pit	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T380	20,000 gallon Nitrogen tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T414	23,700-gallon DeIonized Water Tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T403	2400-gallon Effluent Waste Water Tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T401	16,900-gallon Ion Exchange Effluent Waste Water Tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T397	23,700-gallon Process Water Recycle Tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T398	23,700-gallon Process Water Recycle Tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T214	2750-gallon Crystallizer Condensate Tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T241	2750-gallon Crystallizer Condensate Tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T282	4700-gallon Chlorate mixture tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T136	6000-gallon Carbon Dioxide tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
T542	22,000-gallon Chlorate Mixture storage tank	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
BRIET1 & BRIET2	Two 311 ft ³ Brine Ion Exchange Tanks	1998	SC Regulation 61-62.1, Section II(B)(2)(h)
ASB	2800 gallon Aqueous Sodium Bichromate storage tank	2001	SC Regulation 61-62.1, Section II(B)(2)(h)
T520	30,000 gallon No. 2 Fuel Oil Storage Tank (March 2008)	March 2008	SC Regulation 61-62.1, Section II(B)(2)(h)
F	235-horsepower (hp) four-stroke spark ignition (SI) engine	1998	SC Regulation 61-62.1,Section II (B)(2)(f)



Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

November 5, 2013

John Burgher
Anode Coatings Manager
Finnchem USA Inc.
P.O. Box 100
Eastover, South Carolina 29044

Re: Renewed Conditional Major Operating Permit No. CM-1900-0206

Dear Mr. Burgher:

Enclosed is your renewed Conditional Major Operating Permit that will become effective on January 1, 2014. The federally enforceable emissions limitations and operational requirements contained within this Conditional Major Operating Permit are designed to restrict this facility's potential to emit to below major source thresholds. This Conditional Major Operating Permit will be valid through December 31, 2023.

Please be advised that this facility's periodic reporting period begins upon the effective date of this permit. This new Conditional Major Operating Permit may include several periodic reporting requirements with varying submittal frequencies and due dates. Reports required under the terms and conditions of this permit must be completed and submitted in a timely manner in accordance with the periodic reporting schedule found in this permit.

It is important for you and/or an authorized representative responsible for the overall operation of this facility to read this issued permit carefully and to understand all requirements. If any errors or omissions are discovered, please notify Snezana Popova of my staff, via e-mail at popovasn@dhec.sc.gov, or call (803) 898-3823 immediately.

Pursuant to the South Carolina Administrative Procedures Act, any Department decision involving the issuance, denial, suspension, or revocation of a permit or certification may be appealed by the applicant, permittee, licensee, or affected person. Please see the enclosed "Guide to Board Review" for guidelines on filing an appeal.

Sincerely,

Elizabeth J. Basil
Director, Engineering Services Division, Bureau of Air Quality

EJB:snp:kal
Enclosure

cc: Conditional Major File: 1900-0206
ec: Ben Buchnan, BEHS



Office of Environmental Quality Control Bureau of Air Quality Conditional Major Operating Permit

**FinnChem USA Inc.
191 Wateree Station Road
Eastover, South Carolina 29044**

Pursuant to the provisions of the *Pollution Control Act*, Sections 48-1-50(5) and 48-1-110(a), the *1976 Code of Laws of South Carolina*, as amended, and *South Carolina Regulation 61-62, Air Pollution Control Regulations and Standards*, the Bureau of Air Quality authorizes the operation of this facility and the equipment specified herein in accordance with valid construction permits, and the plans, specifications, and other information submitted in the Conditional Major Operating Permit request received on March 13, 2013, as amended. All official correspondence, plans, permit applications and written statements are an integral part of the permit. Any false information or misrepresentation in the application for a construction or operating permit may be grounds for permit revocation.

The operation of this facility is subject to and conditioned upon the terms, limitations, standards, and schedules contained herein or as specified by this permit and its accompanying attachments.

Permit Number: CM-1900-0206

Issue Date: November 5, 2013 Effective Date: January 1, 2014
Expiration Date: December 31, 2023 Renewal Due Date: October 4, 2023


**Director, Engineering Services Division
Bureau of Air Quality**

A. EMISSION UNIT DESCRIPTION

Emission Unit ID	Emission Unit Description
01	Sandblasting Process (Void)
02	Anode Coating Process
03	Metal Etching Process

B EQUIPMENT AND CONTROL DEVICE(S)

B.1 EQUIPMENT FOR EMISSION UNIT 02 – Anode Coating Process

Equipment ID	Equipment Description	Installation Date/Modification Date	Control Device ID	Emission Point ID
27	Anode Coating Application	2002	None	127
28	Electric Curing Oven, 500,000 Btu/hr	2002	None	128, 129
29	Electric Curing Oven, 160,000 Btu/hr	2002	None	N/A

B.2 EQUIPMENT FOR EMISSION UNIT 03 – Metal Etching Process

Equipment ID	Equipment Description	Installation Date/Modification Date	Control Device ID	Emission Point ID
31	Etch Tank (The Etch Tank consists of one 300-gallon etch compartment and one 150-gallon rinse compartment)	2002	32	132

B.3 CONTROL DEVICE(S) FOR EMISSION UNIT 03 – Metal Etching Process

Control Device ID	Control Device Description	Installation Date/Modification Date	Pollutant(s) Controlled
32	Caustic Scrubber	2002	HCl

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Condition
C.1	<p>Emission Unit ID: All</p> <p>Equipment/Control Device ID: All</p> <p>(S.C. Regulation 61-62.1, Section II.J) A copy of the Department issued construction and/or operating permit must be kept readily available at the facility at all times. An owner/operator shall maintain such operational records; make reports; install, use, and maintain monitoring equipment or methods; sample and analyze emissions or discharges in accordance with prescribed methods, at locations, intervals, and procedures as the Department shall prescribe; and provide such other information as the Department reasonably may require. All records required to demonstrate compliance with the limits established under this permit shall be maintained on site for a period of at least 5 years and shall be made available to a Department representative upon request.</p>

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Condition
C.2	<p>Emission Unit ID: 02, 03</p> <p>Equipment/Control Device ID: 27, 28, 29, & 31/32</p> <p>(S.C. Regulation 61-62.5, Standard No. 4, Section IX) Where construction or modification began after December 31, 1985, emissions from these sources (including fugitive emissions) shall not exhibit an opacity greater than 20%.</p>
C.3	<p>Emission Unit ID: 02</p> <p>Equipment/Control Device ID: 27, 28, & 29</p> <p>This process is limited on use of raw material containing Hydrochloric Acid (HCl) and HCl precursor Ruthenium trichloride ($\text{RuCl}_3 \cdot x\text{H}_2\text{O}$) to an amount not to exceed 17.6 pounds per day as HCl in order to comply with SC Regulation 61-62.5, Standard No. 8.</p> <p>The owner/operator must record the daily actual usage of raw materials containing Hydrochloric Acid (HCl) and HCl precursor Ruthenium trichloride ($\text{RuCl}_3 \cdot x\text{H}_2\text{O}$) daily. Any increase in allowable emission rate must be approved by the Bureau of Air Quality and may require re-modeling to demonstrate compliance with the above listed standard(s). Reports of the daily raw material usage shall be submitted semiannually. This is a State Only requirement.</p>
C.4	<p>Emission Unit ID: 03</p> <p>Equipment/Control Device ID: 31/32</p> <p>This equipment is limited to the use of three (3) 55-gallon drums of acid solution per day in order to maintain HCl emissions below 6.3 lb/day HCl in order to comply with SC Regulation 61-62.5, Standard No. 8.</p> <p>The owner/operator must record the number of gallons of acid solution used daily. Any increase in allowable emission rate must be approved by the Bureau of Air Quality and may require re-modeling to demonstrate compliance with the above listed standard. Reports of the acid solution usage shall be submitted semiannually. This is a State Only requirement.</p>
C.5	<p>Emission Unit ID: 03</p> <p>Equipment/Control Device ID: 31/32</p> <p>The owner/operator shall continue to operate and maintain pressure drop indicators and pH meters on each scrubber module (Equip ID 32). Each parameter shall be recorded at start-up, shutdown and every four hours while in operation and shall be made available to Department personnel upon request.</p> <p>Operational ranges for the monitored parameters have been established to ensure proper operation of the pollution control equipment. These operational ranges for the monitored parameters were derived from stack test data, vendor certification, and/or operational history and visual inspections, which demonstrate the proper operation of the equipment. The facility shall maintain the established ranges and supporting documentation for these monitored parameters. Operating ranges may be updated following submittal to the Director of Engineering Services.</p>

C. LIMITATIONS, MONITORING AND REPORTING CONDITIONS

Condition Number	Condition
C.6	<p>Emission Unit ID: 03</p> <p>Equipment/Control Device ID: 31/32</p> <p>All gauges shall be readily accessible and easily read by operating personnel and Department personnel (i.e. on ground level or easily accessible roof level). Monitoring parameter readings (i.e., pressure drop readings, etc.) and inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. Each incidence of operation outside the operational ranges, including date and time, cause, and corrective action taken, shall be recorded and kept on site. Exceedance of operational range shall not be considered a violation of an emission limit of this permit, unless the exceedance is also accompanied by other information demonstrating that a violation of an emission limit has taken place. Reports of these incidences shall be submitted semiannually. If no incidences occurred during the reporting period then a letter shall indicate such.</p> <p>Any alternative method for monitoring control device performance must be preapproved by the Department and shall be incorporated into the permit as set forth in S.C. Regulation 61-62.1 Section II.</p>
C.7	<p>Emission Unit ID: 03</p> <p>Equipment/Control Device ID: 31/32</p> <p>The owner/operator shall maintain on file all measurements including continuous monitoring system or monitoring device performance measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection by Department personnel.</p>
C.8	<p>Emission Unit ID: All</p> <p>Equipment/Control Device ID: All</p> <p>FinnChem USA Inc. (1900-0206) and FinnChem USA Inc. (1900-0172) have been determined to be co-located facilities for Title V applicability purposes. In accordance with South Carolina Regulation 61-62.1, Sec II(G), the facility has agreed to federally enforceable operating limits to limit potential to emit to less than 10 tons per year for each individual hazardous air pollutant and 25 tons per year for the total hazardous air pollutants. Yearly totals are calculated as a twelve month rolling sum.</p> <p>The following two requirements shall be used to comply with this limit:</p> <ol style="list-style-type: none"> 1. The owner/operator shall maintain consumption records of all process-related materials containing hazardous air pollutants (HAP). These records shall include the total amount of each material used, and the HAP content in percent by weight. HAP emissions shall be calculated on a monthly basis, and a twelve-month rolling sum shall be calculated for total HAP emissions. The twelve-month rolling sum shall be less than 10 tons per year of a single HAP or 25 tons per year of an aggregate of HAPs. The owner/operator shall maintain all records, including material purchase orders, invoices, and material data sheets, etc. for a period of at least five (5) years from the date generated, and shall make these records available to Department personnel upon request. Semiannual reports including all recorded parameters and calculated values shall be submitted to the Bureau. An algorithm, including example calculations and emission factors, explaining the method used to determine HAP rates shall be included in the initial report. Subsequent submittals of the algorithm and example calculations are unnecessary, unless the method of calculation is found to be unacceptable by the Bureau or if the facility changes the method of calculating emissions and/or changes emission factors. 2. The owner/operator shall continue to operate, and maintain pressure drop indicators and pH meters on each scrubber module of the Caustic Scrubber (Equip ID 32) as described in the Condition C5 of this permit. The scrubber shall be in place and operational whenever processes controlled by the scrubber(s) are running, except during periods of scrubber malfunction or mechanical failure.

D OPERATIONAL FLEXIBILITY

Condition Number	Conditions
D.1	<p>The following activities shall be allowed, without a construction permit, or without revising or reopening the operating permit unless otherwise specified by any State or Federal requirement. This flexibility does not relieve the owner/operator of any source from any obligation to comply with any applicable requirements. The owner/operator may be subject to possible enforcement if the activity is found to be inconsistent with the permit flexibility conditions.</p> <p>Criteria:</p> <ol style="list-style-type: none"> 1. The activity will not result in emissions that will exceed any limit in this permit. 2. The activity does not result in a change in a permit term, condition or limit. 3. The activity will not result in emissions that exceed the facility's potential to emit. 4. The activity does not meet the definition of new source, modification or reconstruction under 40 CFR Part 60, 61 or 63. Exceptions to this are sources that are exempt per S.C. Regulation 61-62.1 Section II or the BAQ published exempt activities list. For existing sources subject to 40 CFR Part 63, per 63.9(j), any change in the notification information already provided (such as the notification of compliance status) shall be submitted in writing within 15 calendar days after the change. 5. Compliance with S.C. Regulation 61-62.5 Standards No. 2 (Ambient Air Quality Standards), No. 7 (PSD) and No. 8 (Toxic Air Pollutants) is not affected. <p>Allowed Activities:</p> <ol style="list-style-type: none"> 1. Any activity exempted in S.C. Regulation 61-62.1, Section II or the BAQ published exempt activities list. Case by case exemptions described in Section II will require prior written approval. 2. Replacement of process equipment such as reactors, storage tanks, etc. with equipment identical in capacity, dimensions, and characteristics or with equipment that will have the same or lower emissions. 3. Manufacture of new products in existing equipment. 4. Changes in product formulation in existing equipment. 5. Additions of new raw material and changes in raw material usage or formulation including paints and other coatings that do not necessitate construction or modification to existing equipment. 6. Addition of control devices for the purpose of hygiene, safety, or other non-creditable decreases in emissions. 7. Re-routing of stacks or any change in stack parameters (i.e. stack height, orientation, diameter, removal or addition of rain caps) as long as they do not impact modeled stack parameters. 8. Changes in the sequence of process operations. 9. Change in the method of raw material addition. 10. Change in the method of product packaging. 11. Operational changes in the physical dimensions, layout, configuration, arrangement or locations of process equipment to accommodate production needs as long as it does not affect air emissions or impact modeled stack parameters. 12. Changes in the supplier of raw materials, fuels, or paints and other coatings that do not necessitate construction or modification to existing equipment. 13. Change in operating parameters as long as they do not quantitatively affect air emissions. 14. Portable equipment such as generators, compressors, and other diesel-driven portable units for emergency, overhaul, maintenance, or similar activities that will have a duration of twelve months or less. 15. The facility may emit air toxics or criteria pollutants previously modeled at levels different than those listed in Attachment A or emit a new air toxic from existing equipment without prior written approval of the new modeled emission rate. 16. Other activities as allowed by BAQ developed exemption guidance. <p>Modeling: Changes that impact an air dispersion modeling demonstration, but otherwise are allowed under the criteria in this condition, shall be allowed provided:</p>

D OPERATIONAL FLEXIBILITY

Condition Number	Conditions
	<ol style="list-style-type: none"> 1. Updated air dispersion modeling is conducted prior to the source operating under the new operating scenario. The modeling results for the new operating scenario are kept on site and available for inspection. 2. The facility must submit a written request to modify the modeling demonstration within 3 business days of operating under the new operating scenario. The modeling demonstration shall include a description of the scenario, emission rates, modeling results, and modeling files. <p>Recordkeeping: As part of this permit flexibility procedure, the facility shall keep an on-site implementation log (OSIL) to document all changes made under the procedure. The OSIL will be kept with the facility's air permit. The OSIL shall provide detailed information supporting the changes made under this procedure. At a minimum all of the following items shall be included in the OSIL:</p> <ol style="list-style-type: none"> 1. A brief description of the activity and how it relates to the above pre-approved changes. Include impacted equipment identification numbers, operating permit identification unit, stack identification. 2. The date the activity occurred. 3. A demonstration that the activity did not trigger any new regulations, standards or requirements. 4. A demonstration that the activity did not result in a change in a permit term, condition or limit. 5. Emissions calculations for all regulated air pollutants resulting from the activity and demonstration that when added to the existing emissions all permit limits will be met. This should include the increase and the facility-wide emissions totals from the activity. <p>Reporting: If activities are undertaken using this permit flexibility condition, the OSIL changes shall be submitted annually (end of the calendar year) to the Director of the Engineering Services.</p>

E. MODELING REQUIREMENTS

Condition Number	Condition
E.1	<p>Air dispersion modeling analysis or other information has demonstrated that emissions from this facility's operation will not interfere with the attainment and maintenance of any state or federal ambient air quality standard. Any changes in the parameters used in the air dispersion modeling may require a review by the facility to determine continuing compliance with these standards. These potential changes include any decrease in stack height, decrease in stack velocity, increase in stack diameter, decrease in stack exit temperature, increase in building height or building additions, increase in emission rates, decrease in distance between stack and property line, changes in vertical stack orientation, and installation of a rain cap that impedes vertical flow. Parameters that are not required in the determination will not invalidate the demonstration if they are modified. The emission rates used in the determination are listed in Attachment - Modeled Emission Rates of this permit. Higher emission rates may be administratively incorporated into Attachment - Modeled Emission Rates of this permit provided a demonstration using these higher emission rates shows the attainment and maintenance of any state or federal ambient air quality standard or with any other applicable requirement. Variations from the input parameters in the demonstration shall not constitute a violation unless the maximum allowable ambient concentrations identified in the standard are exceeded.</p> <p>The owner/operator shall maintain this facility at or below the emission rates as listed in Attachment - Modeled Emission Rates, not to exceed the pollutant limitations of this conditional major operating permit. Should the facility wish to increase the emission rates listed in Attachment - Modeled Emission Rates, not to exceed the pollutant limitations in the body of this permit, it may do so by the administrative process specified above. This is a State Only enforceable requirement.</p>

FinnChem USA Inc.
CM-1900-0206
Page 8 of 10

H. PERIODIC REPORTING SCHEDULE

Compliance Monitoring Report Submittal Frequency	Reporting Period (Begins on the effective date of the permit)	Report Due Date
Quarterly	January-March April-June July-September October-December	April 30 July 30 October 30 January 30
Semiannual	January-June April-September July-December October-March	July 30 October 30 January 30 April 30
Annual	January-December April-March July-June October-September	January 30 April 30 July 30 October 30

Note: This reporting schedule does not supersede any federal reporting requirements including but not limited to 40 CFR Part 60, 40 CFR Part 61, and 40 CFR Part 63. All federal reports must meet the reporting time frames specified in the federal standard unless the Department or EPA approves a change.

I. REPORTING CONDITIONS

Condition Number	Condition
I.1	Reporting required in this permit, shall be submitted in a timely manner as directed in the Periodic Reporting Schedule of this permit.
I.2	All reports and notifications required under this permit shall be submitted to the person indicated in the specific condition at the following address: <p style="text-align: center;">2600 Bull Street Columbia, SC 29201</p> The contact information for the local EQC Regional office can be found at: http://www.scdhec.gov/environment/envserv/regions.htm .
I.3	Unless elsewhere specified within this permit, all reports required under this permit shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality.

I. REPORTING CONDITIONS

Condition Number	Condition
I.4	<p>(S.C. Regulation 61-62.1, Section II.J) For sources not required to have continuous emissions monitors, any malfunction of air pollution control equipment or system, process upset or other equipment failure which results in discharges of air contaminants lasting for one hour or more and which are greater than those discharges described for normal operation in the permit application shall be reported to the Department’s local Environmental Quality Control Regional office within 24 hours after the beginning of the occurrence.</p> <p>The owner/operator shall also submit a written report within 30 days of the occurrence. This report shall be submitted to the Manager of the Technical Management Section, Bureau of Air Quality and shall include as a minimum, the following:</p> <ol style="list-style-type: none"> 1. The identity of the stack and/or emission point where the excess emissions occurred; 2. The magnitude of excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the excess emissions; 3. The time and duration of excess emissions; 4. The identity of the equipment causing the excess emissions; 5. The nature and cause of such excess emissions; 6. The steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction; 7. The steps taken to limit the excess emissions; and, 8. Documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated, to the maximum extent practicable, in a manner consistent with good practice for minimizing emissions.
I.5	<p>(S.C. Regulation 61-62.1, Section II.M) Within 30 days of the transfer of ownership/operation of a facility, the current permit holder and prospective new owner/operator shall submit to the Director of Engineering Services a written request for transfer of the source operating or construction permits. The written request for transfer of the source operating or construction permit shall include any changes pertaining to the facility name and mailing address; the name, mailing address, and telephone number of the owner/operator for the facility; and any proposed changes to the permitted activities of the source. Transfer of the operating or construction permits will be effective upon written approval by the Department.</p>

J. PERMIT RENEWAL AND EXPIRATION

Condition Number	Condition
J.1	<p>(S.C. Regulation 61-62.1, Section II.H) The owner/operator shall submit an operating permit renewal request to the Department no later than 90 days prior to the operating permit expiration date. The operating permit renewal requests shall include a description of any changes at the facility that have occurred since issuance of the last operating permit that may affect the operating permit or operating permit review. In general, the description shall include any addition, alteration or removal of sources, including sources exempt from construction permit requirements; addition, alteration or removal of emission limitations; any changes to monitoring, recordkeeping, or reporting requirements; and any changes or additions to special permit conditions.</p>
J.2	<p>Submission of a request for renewal meeting the requirements in S.C. Regulation 61-62.1, Section II.H, shall allow the owner/operator to continue operating pursuant to the most recent operating permit, until such time as the Department has taken final action on the request for renewal.</p>

K. GENERAL CONDITIONS

Condition Number	Condition
K.1	This permit only covers emission units and control equipment while physically present at the indicated facility. Unless the permit specifically provides for the equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted facility, notwithstanding the expiration date specified on the permit.
K.2	The permittee shall pay permit fees to the Department in accordance with the requirements of S.C. Regulation 61-30, Environmental Protection Fees.
K.3	This permit may be reopened by the Department for cause or to include any new standard or regulation which becomes applicable to a source during the life of the permit.
K.4	<p>In the event of an emergency, as defined in S.C. Regulation 61-62.1, Section II.L, the owner/operator shall demonstrate the affirmative defense of an emergency through properly signed, contemporaneous operating logs, and other relevant evidence that verify:</p> <ol style="list-style-type: none"> 1. An emergency occurred, and the owner/operator can identify the cause(s) of the emergency; 2. The permitted source was at the time the emergency occurred being properly operated; 3. During the period of the emergency, the owner/operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and 4. The owner/operator gave a verbal notification of the emergency to the Department within 24 hours of the time when emission limitations were exceeded, followed by a written report within 30 days. The written report shall include as a minimum, the information required by S.C. Regulation 61-62.1, Section II.J.1.c.i through viii. The written report shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. <p>In any enforcement action, the owner/operator seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency, or upset provision contained in any applicable requirement.</p>
K.5	<p>(S.C. Regulation 61-62.1, Section II.O) Upon presentation of credentials and other documents as may be required by law, the owner/operator shall allow the Department or an authorized representative to perform the following:</p> <ol style="list-style-type: none"> 1. Enter the facility where emissions-related activity is conducted, or where records must be kept under the conditions of the permit. 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. 3. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit. 4. As authorized by the Federal Clean Air Act and/or the S.C. Pollution Control Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

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The emission rates listed herein are not considered federally enforceable limitations but are used to evaluate ambient air quality impact. Until the Department makes a determination that a facility is causing or contributing to an exceedance of a state or federal ambient air quality standard, increases to these emission rates are not in themselves considered violations of these ambient air quality standards (see Modeling Requirements).

STANDARD NO. 2 - MODELED AAQS EMISSION RATES (LBS/HR)							
STACK ID	PM₁₀	PM_{2.5}	SO₂	NO_x	CO	Lead	HF
Boiler A	Exempt	Exempt	2.49	7.01	1.80	Exempt	Exempt
Boiler B	Exempt	Exempt	2.49	7.01	1.80	Exempt	Exempt
FACILITY TOTAL	--	--	4.98	14.02	3.60	--	--
All criteria pollutant emissions come from the Plant Facility 1900-0172. 7/2013 summary							

STANDARD NO. 2 and 7 - EXEMPTED AAQS EMISSION RATES (LBS/HR)							
STACK ID	PM₁₀	PM_{2.5}	SO₂	NO_x	CO	Lead	HF
Boiler A	0.81	0.54	--	--	--	--	--
Boiler B	0.81	0.54	--	--	--	--	--
#25 – Dryer A Dust Scrubber	0.32	0.32	--	--	--	--	--
#26 – Dryer B Dust Scrubber	0.32	0.32	--	--	--	--	--
#28 – Silo Dust Scrubber	0.043	0.043	--	--	--	--	--
#29 – Loading Dust Scrubber	0.063	0.063	--	--	--	--	--
FACILITY TOTAL	2.366	1.826	--	--	--	--	--

STANDARD NO. 7 - MODELED PSD CLASS II INCREMENT EMISSION RATES (LBS/HR)				
STACK ID	Minor Source Baseline Dates			
	5/20/1981	N/A	5/20/1981	10/26/1988
	PM₁₀	PM_{2.5}	SO₂	NO_x
Boiler A	Exempt	--	2.49	7.01
Boiler B	Exempt	--	2.49	7.01
FACILITY TOTAL	--	--	4.98	14.02
All criteria pollutant emissions come from the Plant Facility 1900-0172. 7/2013 summary				

STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES (LBS/HR)			
STACK ID	Chlorine	Hydrogen Chloride	
	7782-50-5	7647-01-0	
PLANT FACILITY 1900-0172			
Boiler A	--	0.177	
Boiler B	--	0.177	

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STANDARD NO. 8 - MODELED AIR TOXIC EMISSION RATES (LBS/HR)				
STACK ID	Chlorine	Hydrogen Chloride		
	7782-50-5	7647-01-0		
#9 - Air Exhaust Scrubber	0.0028 (0.0026)	0.0012		
#11 - Hydrogen Scrubber / Line 10	0.062 (0.058)	--		
#12 - Hydrogen Scrubber / Line 20	0.062 (0.058)	--		
#13 - Hydrogen Scrubber / Line 30	0.062 (0.058)	--		
#14 - Hydrogen Scrubber / Line 40	0.062 (0.058)	--		
SHOP FACILITY 1900-0206				
#128, #129- Electric Curing Oven , 0.50MMBtu/Hr	--	0.734		
#132-Etch Tank	--	0.22		
TOTAL-BOTH FACILITIES	0.2508 (0.23)	1.31		
The current emission rates for Chlorine are listed in parentheses. The previous rates were used to calculate the modeled concentrations. The previous rates will be retained until modeling is updated. 8/2013				