



**PERMIT**  
**Under the Environmental Conservation Law (ECL)**

**IDENTIFICATION INFORMATION**

Permit Type: Air State Facility  
Permit ID: 2-6007-00140/00013  
Effective Date: 12/06/2005      Expiration Date: No expiration date

Permit Issued To: NEW YORK ORGANIC FERTILIZER CO  
1108 OAK POINT AVE  
BRONX, NY 10474

SYNAGRO TECHNOLOGIES INC  
1800 BERING DRIVE SUITE 1000  
HOUSTON, TX 77057

Contact: JOHN Z KOPEC  
NYOFCO SLUDGE PELLETIZATION FACILITY  
1108 OAK POINT AVE  
BRONX, NY 10474  
(718) 991-7417

Facility: NYOFCO SLUDGE PELLETIZATION FACILITY  
1108 OAK POINT AVE  
BRONX, NY 10474

Contact: PETER SCORZIELLO  
NYOFCO SLUDGE PELLETIZATION FACILITY  
1108 OAK POINT AVE  
BRONX, NY 10474  
(718) 991-7417

Description:

**PERMIT DISCRIPTION**  
**NYOFCO Sludge Pelletization Facility**  
**DEC ID # 2-6007-00140/00013 (ASF)**

The facility is proposing to install a new odor scrubber for the Tipping area at the facility in conjunction with Flue Gas Recirculation (FGR) at NYOFCo. The Flue Gas Recirculation (FGR) project will reduce the emissions of NO<sub>x</sub> and VOCs, and hence reduce the potential for ground-level ozone formation. This will also ease energy demands for the dryers. FGR reuses combustion air, by recirculating it back to the beginning of the dryer process. The recirculated air has already been through the dryer and is already warm. Adding this warm air reduces the energy requirements, saves fuel, and therefore reduces the emissions associated with energy consumption. To ensure that the new ventilation system will not impact the neighborhood, NYOFCo will install a new wet scrubber downstream of the new ventilation fan (in the tipping area) for reducing odor at the facility. The installation of the odor scrubber and the FGR will not



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result in exceedances of any AGCs or SGCs health guidelines and there will be no exceedances of any odor thresholds. Overall, this project will have a meaningful beneficial impact on the environment.

The NYS DEC has approved the installation of Flue Gas Recirculation (FGR), on three of six processing lines (Dryer Trains # 4, #5 & #6), which will result in overall lower emissions from the facility. The operation of the FGR will also cause a decrease in the ventilation of the process building. Therefore, a new ventilation system needs to be installed. NYOFCo is proposing to do this through the installation of a scrubber. As of November 16, 2005, NYOFCo has successfully completed the installation of FGR on processing lines # 4 & #5. Processing line # 6 is scheduled coming on line for start up utilizing the FGR in the summer of 2006.

This project involves the construction and installation of an air-ventilation odor control chemical scrubber for New York Organic Fertilizer Company (NYOFCo). NYOFCo is a biosolids thermal drying pelletization facility. The scrubber is being added for odor control, i.e., the oxidation of reduced sulfur compounds. Based on the sampling analysis, the odor compounds of interest are mercaptans, dimethyl sulfide, and dimethyl disulfide. Hydrogen sulfide levels were low relative to these reduced sulfur compounds. The air dispersion screening modeling that the facility conducted ensures that VOC emissions meet the state ambient standards, therefore, reduced sulfur compound removal is the focus of this odor scrubber' design.

While it is impossible to truly assess the actual emission reductions from the installation of the scrubber and FGR at this time, it is very clear that FGR alone will provide a net decrease in emissions as demonstrated by a previous report to NYSDEC titled "NYOFCo Exhaust Gas Recirculation" and was dated March 11, 2004. Preliminary observations demonstrated that similar benefits were seen at NYOFCo once FGR was added to Dryer Train # 4 and as a result, NYOFCo has elected to proceed with FGR on two more units (Dryer Trains # 5 & # 6) with the NYSDEC's expressed approval. The NYS DEC has approved the installation of Flue Gas Recirculation (FGR), on three of six processing lines (Dryer Trains # 4, #5 & #6), which will result in overall lower emissions from the facility. The operation of the FGR will also cause a decrease in the ventilation of the process building. Therefore, a new ventilation system needs to be installed. NYOFCo is proposing to do this through the installation of a scrubber. As of November 16, 2005, NYOFCo has successfully completed the installation of FGR on processing lines # 4 & #5. Processing line # 6 is scheduled coming on line for start up utilizing the FGR in the summer of 2006.

The scrubber three-stage design: In order to remove the primary odorant of concern, dimethyl sulfide (DMDS), ammonia must first be removed. Once ammonia is removed in the first stage of treatment, an oxidizing second stage removes reduced sulfur compounds. In order to effectively remove reduced sulfur compounds, the second stage should operate at a high oxidation/reduction potential (ORP) to ensure adequate oxidant availability for removal. A third stage is included to polish the remaining odor. This three-stage design includes an ammonia removal stage with recirculating water (and possibly pH adjustment if needed), a reduced sulfur stage with recirculating hypochlorite solution and a final short high pH stage. The final (third) stage is a once-through system with either a low-flow caustic solution or only water during low concentration conditions. The caustic solution added becomes part of the second stage recirculation system. Blowdown in the second stage is made by the third stage caustic solution. Fresh sodium hypochlorite is added to the second stage recirculation system directly based on ORP. In the second stage design, the most concentrated reduced sulfide odorant measured was dimethyl sulfide (DMS), and the second compound of interest, dimethyl disulfide (DMDS) was second in concentration.



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The expected removal efficiency for methyl mercaptan (MM) is similar to that of DMS. The third stage is included for odor polishing and mist elimination only.

**Scrubber Impact Assumptions:** This scrubber combined with recirculation requiring less airflow through the dryers will actually improve overall particulate removal from the facility. The scrubber is being included for odor control for reduced sulfur compounds only. Overall, when both the modifications to the recirculation system and the scrubber are considered, criteria pollutant emissions will either be reduced or their change will be negligible. The two criteria compound that will be greatly reduced are total VOCs and NOx. The NOx will be greatly reduced from less fuel NOx formation, less atmospheric conversion of Nitrogen to NOx because of less airflow in the dryers, and because the scrubber is not a combustion process so no new NOx are added from the scrubber to offset the savings in the dryers.

Adding recirculation and a new ventilation fan with a scrubber will also reduce total VOCs. Recirculation will create longer detention times in the dryers and the RTOs, so pollutants will have more exposure to heat, and less airflow will be necessary. Based on monitoring, the continuous emissions monitoring system (CEMS) on Dryer Train # 4 directly before and directly after the installation of FGR, approximately 0.7 lb/hr less VOCs were observed with recirculation. Therefore, it is anticipated that at least 2 - 3 tpy of total VOCs could be reduced. Therefore, it is likely that with FGR, the total reduction in VOCs for the dryers will at least average 2 - 3 tpy. As long as the total VOCs from the Tipping Room will be less through the scrubber, and less than the total VOC reduction from FGR, and the individual compound emission estimating and modeling do not show impacts above state guidelines, then it is reasonable to assume a reduction in overall emissions and minimal adverse impact from this odor control processing operational change. During the September 2005 sampling, this assumption was confirmed. The expected emissions from an operating scrubber will be approximately 2 tpy. This translates to a net savings in VOC emissions from a scrubber with no VOC control since the scrubber emissions will be more than offset by the VOC reductions from FGR.

Based on the expected scrubber airflow rate and conversion factors, the total VOCs (representative of total non-methane hydrocarbons) corresponds to approximately 2 tpy. This emission rate combined with the reduction from FGR translates to a net savings in VOC emissions from a scrubber with no VOC control. The scrubber emissions will be more than offset by the recirculation project VOC reductions in just one dryer train. Therefore, the installation of the scrubber along with exhaust gas recirculation is not expected to increase emissions from the facility above the current permit limits.

The installation of a scrubber in addition to FGR is not expected to adversely effect emissions or to cause emissions to exceed NYOFCo's current permit limits. Emissions of NOx, CO, and SO2 are products of combustion and not relevant to scrubber emissions. Particulate matter loading to the scrubber will be substantially less than particulate produced in the drying process and any particulate produced would be reduced by the scrubber, therefore, the only remaining concerns are odor and individual compound concerns.

The sludge deposited in the tipping area is thickened bestialities that have not yet been thermally treated and their potential for emissions of VOCs is low. Therefore, the expected impact from these emissions is low. This report demonstrates the low potential. Via an air dispersion screening modeling, the results indicated that all compounds would be at least an order of magnitude lower than the NYSDEC Short-term Guideline Concentrations (SGCs) and Annual Guideline Concentrations (AGCs) (as specified in New York State DAR-1, Guidelines For the Control of Toxic Ambient Air Contaminants). In addition,



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results from the dispersion modeling demonstrate that there is extremely low potential for VOC emissions and that given the distance between the facility and the neighbor, impacts from this stack will not exceed the state guidelines.

**Modeling Results:** Air dispersion screening modeling was conducted to compare the modeled impacts to health guidelines (SGCs and AGCs) and typical odor thresholds. This modeling determined that SGCs and AGCs (New York State DAR-1 Guidelines for the Control of Toxic Ambient Air Contaminants) were met for all compounds modeled as being emitted from the odor scrubber. For the odor scrubber, all hourly impacts met applicable SGCs and all annual impacts met applicable SGCs and AGCs. For the Dryer, the total hourly impact for the dryers meets the SGC and the annual impact meets the AGC. For the combined results of the odor scrubber and the six dryers, the maximum concentrations were simply added together, without taking into account source separation or location of maximum impacts. The results show the SGC and AGC for ammonia are met.

In order to consider additive effects, the list of compounds expected to be emitted from both the odor scrubber and the dryer stacks was examined. The only compound common to both sources was ammonia. The benefit of FGR is to reduce emissions of all compounds. The expected new flow rate was used in the modeling of the three dryers that were modified and will be modified with FGR (Dryer Trains # 4, # 5 & # 6) to conservatively model plume dispersion. The total maximum ammonia concentrations met both the SGC and AGC.

The FGR is expected to have other environmental benefits. Since the reticulated process air has already been heated, the recirculating loop results in a small reduction in the thermal energy demanded by the dryers; this reduced heat requirement corresponds to a reduced requirement to burn natural gas in the dryers. In addition, since the exhaust gas flow from the dryer trains will be reduced, the RTOs will require less energy (natural gas) to heat the exhaust gas. The reduction in natural gas burning associated with this project will result in reduced emission of the products of combustion.

The process of destroying VOCs in the RTO is primarily dependent on two factors; the temperature in the RTO, and the amount of time the gas being treated is maintained at the elevated temperature. The addition of the FGR is not expected to have an effect on temperature within the RTO. Additionally, the reticulated gas stream will be redirected to the dryers after being treated by the dryer scrubber. This is important since all reticulated gas will be treated a second time where additional particulate matter, and water soluble and condemnable constituents of the dryer exhaust will be removed prior to being directed to the RTOs.

The facility will be altering the drying process on certain dryer trains (for a total of three dryer trains with recirculating) in order to incorporate exhaust gas recirculating, with the expectation to reduce facility emissions, reduce energy consumption, and increase operator safety. Per a Condition of the Consent Order R2-20031027-300 between the DEC and NYOFCo, FGR will be incorporated since it has been proven to reduce certain criteria pollutants including NOx.

**Comparison to Odor Thresholds:** The impacts of contaminants emitted from the scrubber have been compared to odor thresholds. The odor thresholds are compared to the modeled concentrations resulting from scrubber emissions. These modeled scrubber emissions assume no control of VOCs and no control of most sulfur compounds. The control was assumed for dimethyl sulfide (DMS) (85%), isobutyl mercaptan (85%), and dimethyl disulfide (DMDS) (70%).



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Scrubber Impact Assumptions: This scrubber combined with recirculation requiring less airflow through the dryers will actually improve overall particulate removal from the facility. The scrubber is being included for odor control for reduced sulfur compounds only. Overall, when both the modifications to the recirculation system and the scrubber are considered, criteria pollutant emissions will either be reduced or their change will be negligible. The two criteria compound that will be greatly reduced are total VOCs and NOx. The NOx will be greatly reduced from less fuel NOx formation, less atmospheric conversion of Nitrogen to NOx because of less airflow in the dryers, and because the scrubber is not a combustion process so no new NOx are added from the scrubber to offset the savings in the dryers.

As long as the total VOCs from the Tipping Room through the scrubber will be less than the total VOC reduction from FGR and the emission estimating and modeling discussion do not show impacts above state guidelines, then it is reasonable to assume a reduction in overall emissions and minimal adverse impact from this odor control processing operational change. During the September 2005 sampling, this assumption was confirmed. The expected emissions from an operating scrubber will be approximately 2 tpy . This translates to a net savings in VOC emissions from a scrubber with no VOC control since the scrubber emissions will be more than offset by the VOC reductions from FGR.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator:                 JOHN F CRYAN  
  DIVISION OF ENVIRONMENTAL PERMITS  
  ONE HUNTERS POINT PLAZA, 47-40 21ST STREET  
  LONG ISLAND CITY, NY 11101-5407

Authorized Signature: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_\_



**Notification of Other State Permittee Obligations**

**Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification**

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

**Item B: Permittee's Contractors to Comply with Permit**

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

**Item C: Permittee Responsible for Obtaining Other Required Permits**

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

**Item D: No Right to Trespass or Interfere with Riparian Rights**

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



**LIST OF CONDITIONS**

**DEC GENERAL CONDITIONS**

**General Provisions**

Facility Inspection by the Department

Relationship of this Permit to Other Department Orders and Determinations

Applications for Permit Renewals and Modifications

Permit Modifications, Suspensions and Revocations by the Department

**Facility Level**

Submission of Applications for Permit Modification or Renewal-REGION 2

HEADQUARTERS



**DEC GENERAL CONDITIONS**  
**\*\*\*\* General Provisions \*\*\*\***  
**GENERAL CONDITIONS - Apply to ALL Authorized Permits.**

**Condition 1: Facility Inspection by the Department**  
**Applicable State Requirement: ECL 19-0305**

**Item 1.1:**

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

**Item 1.2:**

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

**Item 1.3:**

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

**Condition 2: Relationship of this Permit to Other Department Orders and Determinations**  
**Applicable State Requirement: ECL 3-0301.2(m)**

**Item 2.1:**

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

**Condition 3: Applications for Permit Renewals and Modifications**  
**Applicable State Requirement: 6NYCRR 621.13**

**Item 3.1:**

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

**Item 3.2:**

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

**Item 3.3:**

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual



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transfer of ownership.

**Condition 4: Permit Modifications, Suspensions and Revocations by the Department**  
**Applicable State Requirement: 6NYCRR 621.14**

**Item 4.1:**

The Department reserves the right to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

**\*\*\*\* Facility Level \*\*\*\***

**Condition 5: Submission of Applications for Permit Modification or Renewal-REGION 2 HEADQUARTERS**  
**Applicable State Requirement: 6NYCRR 621.5(a)**

**Item 5.1:**

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator  
Region 2 Headquarters  
Division of Environmental Permits  
1 Hunters Point Plaza, 4740 21st Street  
Long Island City, NY 11101-5407  
(718) 482-4997

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**Permit Under the Environmental Conservation Law (ECL)**

**ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT**

**IDENTIFICATION INFORMATION**

Permit Issued To: NEW YORK ORGANIC FERTILIZER CO  
1108 OAK POINT AVE  
BRONX, NY 10474

SYNAGRO TECHNOLOGIES INC  
1800 BERING DRIVE SUITE 1000  
HOUSTON, TX 77057

Facility: NYOFCO SLUDGE PELLETIZATION FACILITY  
1108 OAK POINT AVE  
BRONX, NY 10474

Authorized Activity By Standard Industrial Classification Code:  
4952 - SEWERAGE SYSTEMS  
5191 - FARM SUPPLIES

Permit Effective Date: 12/06/2005

Permit Expiration Date: No expiration date.



**LIST OF CONDITIONS**

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 1 ECL 19-0301: Contaminant List
- 2 6NYCRR 201-1.4: Unavoidable noncompliance and violations
- 3 6NYCRR 201-5: Emission Unit Definition
- 6 6NYCRR 211.2: Air pollution prohibited

**Emission Unit Level**

- 4 6NYCRR 201-5: Emission Point Definition By Emission Unit
- 5 6NYCRR 201-5: Process Definition By Emission Unit



**STATE ONLY ENFORCEABLE CONDITIONS**

**\*\*\*\* Facility Level \*\*\*\***

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability**

**Item A: Public Access to Recordkeeping for Facilities With State Facility Permits - 6NYCRR Part 201-1.10(a)**

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1) , and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

**Item B: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5**

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or

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law.

**STATE ONLY APPLICABLE REQUIREMENTS**

**The following conditions are state only enforceable.**

**Condition 1: Contaminant List**

**Effective between the dates of 12/06/2005 and Permit Expiration Date**

**Applicable State Requirement: ECL 19-0301**

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

No contaminants.

**Condition 2: Unavoidable noncompliance and violations**

**Effective between the dates of 12/06/2005 and Permit Expiration Date**

**Applicable State Requirement: 6NYCRR 201-1.4**

**Item 2.1:**

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

(a) The facility owner and/or operator shall compile and maintain records of all equipment maintenance or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate



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of the emission rates. These reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

**Condition 3: Emission Unit Definition**  
**Effective between the dates of 12/06/2005 and Permit Expiration Date**

**Applicable State Requirement: 6NYCRR 201-5**

**Item 3.1:**

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-00007

Emission Unit Description:

Emission Unit U-00007 consists of a 50,000 cubic feet per minute 3 stage sulfuric acid, hypochlorite and sodium hydroxide chemical odor reducing scrubber.

The 50,000 cfm multi-staged wet scrubber and ventilation fan system will effectively control odors from the tipping area. Air ventilated from the tipping area will be treated in a three-stage chemical scrubber with sodium hydroxide, sulfuric acid and sodium hypochlorite prior to being emitted into the atmosphere.

This odor control project is initiated in connection with the installation of flue gas recirculation systems on 3 dryer trains to further control air emissions from the facility and reduce fuel consumption. The three dryer trains are # 4, # 5 & #6.

Building(s): 001



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**Condition 6: Air pollution prohibited**  
**Effective between the dates of 12/06/2005 and Permit Expiration Date**

**Applicable State Requirement: 6NYCRR 211.2**

**Item 6.1:**

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

**\*\*\*\* Emission Unit Level \*\*\*\***

**Condition 4: Emission Point Definition By Emission Unit**  
**Effective between the dates of 12/06/2005 and Permit Expiration Date**

**Applicable State Requirement: 6NYCRR 201-5**

**Item 4.1:**

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-00007

Emission Point: 00007

Height (ft.): 81

Diameter (in.): 60

NYTMN (km.): 4517.7

NYTME (km.): 593.4

Building: 001

**Condition 5: Process Definition By Emission Unit**  
**Effective between the dates of 12/06/2005 and Permit Expiration Date**

**Applicable State Requirement: 6NYCRR 201-5**

**Item 5.1:**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00007

Process: P07

Source Classification Code: 3-01-205-03

Process Description:

In order to effectively control odors from the tipping area, the facility is installing a 50,000 cfm multi-staged wet scrubber and ventilation fan system. Air ventilated from the tipping area will be treated in a three-stage chemical scrubber with sodium hydroxide, sulfuric acid and

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sodium hypochlorite prior to being emitted into the atmosphere. This odor control project is initiated in connection with the installation of flue gas recirculation systems on 3 dryer trains to further control air emissions from the facility and reduce fuel consumption. The three dryer trains are # 4, # 5 & #6.

Emission Source/Control: SC007 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: S0007 - Process  
Design Capacity: 50,000 cubic feet per minute