

# COUNTY



# OF HILLSBOROUGH

## MEMORANDUM

Date August 21, 1984

To Willard Hanks, DER through Jerry Campbell, EPC

From Victor San Agustin, EPC VSA

Subject: Construction Permit For NITRAM, INC.

The new plant is designed to recover more heat from the catalytic oxidation of ammonia. Pollutants (turbine gas) evolving from the absorption tower are preheated through 4 turbine gas heaters whose heat is derived from the initial chemical reaction. The turbine gas reaches a temperature of 900°F, is premixed with natural gas, and catalytically reduced to CO<sub>2</sub>, H<sub>2</sub>O, and N<sub>2</sub> on a theoretical basis. The manufacturer guarantees an outlet NO<sub>x</sub> concentration of 200 PPM.

Having reviewed the application, I recommend approval to issue a construction permit with the following conditions:

1. Nitrogen oxides expressed as NO<sub>2</sub> shall not exceed 3 lbs/ton of 100% acid produced or 100.5 lbs/hr based on a maximum production rate of 33.5 TPH of 100% acid.
2. Visible emissions shall not exceed 5% opacity. [Chap. 1-3.03, VI, F.1.b of the HCEPC rules].
3. Compliance testing shall be by the test methods and procedures specified under 40 CFR 60.73.A simultaneous EPA Method 9 with a test duration of at least 60 minutes shall be required.
4. During compliance testing, the stacks shall be tested concurrently for NO<sub>x</sub> and visible emissions.
5. Compliance testing shall be conducted within 30 days of start-up and within 10% of the maximum permitted production rate of 33.5 TPH of 100% acid.
6. The HCEPC shall be given at least 15 days written notice prior to compliance testing.
7. Nitram shall apply for a permit to operate by submitting a Certificate of Completion of Construction and compliance test results within 45 days of the testing date.

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8. Nitram shall install, calibrate, maintain and operate a continuous emission monitor. They shall comply with the emission monitoring requirements specified under 40 CFR 60.73.
9. Objectionable odors are not allowed. [Chap. 1-3.03 of the HCEPC Rules]
10. The permitted production rate shall be 700 TPD or 255,500 TPY. to qualify for an exemption from FAC 17-2.500.

sw/6-A06

DER AIR PERMIT INVENTORY SYSTEM  
PLANT DATA

NAME: NITRAM INC DIST: 40 CNTY: 29 PLANT: 0029  
LOC: 5331 HARTFORD AVE CITY: 4360 ZIP: 33601 OWNR: P TYPE: 12 # OF PNTS: 05

CONTACT: DAVID ROSS ADDR: PO BOX 2968  
CITY: TAMPA ST: FL ZIP: 33601

AQCR: 52 SIC: 2873  
LAT: 28:02:32 LON: 82:25:31  
UTM ZONE: 17 EAST: 363.1 NORTH: 3089.0

COMMENTS: 700 TPD HMO3 PLANT W/ 2 STACKS

DER AIR PERMIT INVENTORY SYSTEM

POINT DATA

NAME: \_\_\_\_\_ DIST: \_\_\_ CNTY: \_\_\_ PLANT: 0029  
&LOC: \_\_\_\_\_ CITY: \_\_\_\_\_ ZIP: \_\_\_\_\_ OWNR: \_\_\_ TYPE: \_\_\_ # OF PNTS: \_\_\_

POINT #: 06 TYPE: \_\_\_ NUMBER OF SCC'S: \_\_\_ NUMBER OF POLLUTANTS EMITTED: \_\_\_

CONSTRUCT PATS: \_\_\_\_\_/\_\_\_\_ #AC \_\_\_\_\_ OPERATE PATS: \_\_\_\_\_/\_\_\_\_ #AO \_\_\_\_\_

ISSUED: \_\_\_\_\_ EXPIRES: \_\_\_\_\_ (YYMMDD) ISSUED: \_\_\_\_\_ EXPIRES: \_\_\_\_\_ (YYMMDD)

DESCRIPTION: SINGLE PROCESS EXHAUSTING INTO 2 STACKS

(64 spaces maximum)

IPP: \_\_\_ NEW/EXIST: N NSPS: X HESHAP: \_\_\_ ECAP: \_\_\_ COMMON POINTS: \_\_\_-\_\_\_

STACK HT: 55, DIAM: 2.5, TEMP: 200F FLOW: 33400 CFM PLUME: \_\_\_\_\_, BLR-CAP: \_\_\_\_\_

OPERATING DATA: NORMAL CONDS. YOR: 84 DEC-FEB: 00% MAR-MAY: 00% JUN-AUG: 010% SEP-NOV: 010%

PERMITTED SCHEDULE HRS/DAY: 21 DAYS/WK: 7 WKS/YR: 52

OPS REPTD: 082184 (YYMMDD) HRS/DAY: 00 DAYS/WK: 0 WKS/YR: 010

PROCESS RATES: RAW MATERIAL: \_\_\_\_\_ UNITS: B2 FUEL: \_\_\_\_\_ UNITS: F1

PRODUCT: \_\_\_\_\_ UNITS: B3 SPACE HEAT: \_\_\_\_\_ %

POINT COMMENTS: 2ND STACK HAS 3.25 FT. DIAM. OTHER DESC. ARE SAME.

COMPLIANCE: NEDS: \_\_\_ QRC: \_\_\_ YR/MO: \_\_\_\_\_ SCHEDULED: \_\_\_\_\_ (YYMM) UPDT: \_\_\_\_\_ (YYMMDD)

PERMIT: \_\_\_ YOR: \_\_\_ INSPECTED: \_\_\_\_\_ (YYMMDD) NEXT-INSP: \_\_\_\_\_ (YYMMDD)

INSP-CMTS: \_\_\_\_\_

EDS: \_\_\_\_\_

DER AIR PERMIT INVENTORY SYSTEM

SCC DATA

NAME: \_\_\_\_\_ DIST: \_\_\_\_\_ CNTY: \_\_\_\_\_ PLANT: 01029

&LOC: \_\_\_\_\_ CITY: \_\_\_\_\_ ZIP: \_\_\_\_\_ OWNER: \_\_\_\_\_ TYPE: \_\_\_\_\_ # OF PNTS: \_\_\_\_\_

POINT #: 016 TYPE: \_\_\_\_\_ NUMBER OF SCC'S: \_\_\_\_\_ NUMBER OF POLLUTANTS EMITTED: \_\_\_\_\_

CONSTRUCT PATS: \_\_\_\_\_ / \_\_\_\_\_ #AC \_\_\_\_\_ OPERATE PATS: \_\_\_\_\_ / \_\_\_\_\_ #AO \_\_\_\_\_

ISSUED: \_\_\_\_\_ EXPIRES: \_\_\_\_\_ (YYMMDD) ISSUED: \_\_\_\_\_ EXPIRES: \_\_\_\_\_ (YYMMDD)

SCC: 31011011302 RATE/YR: \_\_\_\_\_ UNITS: B3 YOR: 84 MAX/HR: 33.5 SOURCE: P

FUEL CONTENT SULFUR: 0.01 % ASH: 0.0 % MBTU: 130 FUEL YOR: 84 CONFID: 2

CMTS: FUEL IS NATURAL GAS IN CATALYTIC COMBUSTOR

(64 spaces maximum)

SCC: \_\_\_\_\_ RATE/YR: \_\_\_\_\_ UNITS: \_\_\_\_\_ YDR: \_\_\_\_\_ MAX/HR: \_\_\_\_\_ SOURCE: \_\_\_\_\_

FUEL CONTENT SULFUR: \_\_\_\_\_ % ASH: \_\_\_\_\_ % MBTU: \_\_\_\_\_ FUEL YOR: \_\_\_\_\_ CONFID: \_\_\_\_\_

CMTS: \_\_\_\_\_

(64 spaces maximum)

SCC: \_\_\_\_\_ RATE/YR: \_\_\_\_\_ UNITS: \_\_\_\_\_ YDR: \_\_\_\_\_ MAX/HR: \_\_\_\_\_ SOURCE: \_\_\_\_\_

FUEL CONTENT SULFUR: \_\_\_\_\_ % ASH: \_\_\_\_\_ % MBTU: \_\_\_\_\_ FUEL YOR: \_\_\_\_\_ CONFID: \_\_\_\_\_

CMTS: \_\_\_\_\_

(64 spaces maximum)

SCC: \_\_\_\_\_ RATE/YR: \_\_\_\_\_ UNITS: \_\_\_\_\_ YRD: \_\_\_\_\_ MAX/HR: \_\_\_\_\_ SOURCE: \_\_\_\_\_

FUEL CONTENT SULFUR: \_\_\_\_\_ % ASH: \_\_\_\_\_ % MBTU: \_\_\_\_\_ FUEL YOR: \_\_\_\_\_ CONFID: \_\_\_\_\_

CMTS: \_\_\_\_\_

(64 spaces maximum)

DER AIR PERMIT INVENTORY SYSTEM  
POLLUTANT DATA

NAME: \_\_\_\_\_ DIST: \_\_\_\_\_ CNTY: \_\_\_\_\_ PLANT: 29

&LOC: \_\_\_\_\_ CITY: \_\_\_\_\_ ZIP: \_\_\_\_\_ OWNR: \_\_\_\_\_ TYPE: \_\_\_\_\_ # OF PNTS: \_\_\_\_\_

POINT #: 02 TYPE: \_\_\_\_\_ NUMBER OF SCC'S: \_\_\_\_\_ NUMBER OF POLLUTANTS EMITTED: \_\_\_\_\_

CONSTRUCT PATS: \_\_\_\_\_ / \_\_\_\_\_ #AC \_\_\_\_\_ OPERATE PATS: \_\_\_\_\_ / \_\_\_\_\_ #AO \_\_\_\_\_

ISSUED: \_\_\_\_\_ EXPIRES: \_\_\_\_\_ (YYMMDD) ISSUED: \_\_\_\_\_ EXPIRES: \_\_\_\_\_ (YYMMDD)

POLLUTANT:

1. NOX#: 42603 NORMAL: 1.01 ESTIMATED/METH: 0.4 MAXIMUM/POT: 38.4  
PRI: 0.50 SEC: 0.39 EFF: 88.3% NXT-TST: \_\_\_\_\_ (YYMMDD) FREQ: 1 REG: 2.660

2. VE#: 11204 NORMAL: \_\_\_\_\_ ESTIMATED/METH: \_\_\_\_\_ / \_\_\_\_\_ MAXIMUM/POT: \_\_\_\_\_  
PRI: 0.50 SEC: 0.39 EFF: 88.3% NXT-TST: \_\_\_\_\_ (YYMMDD) FREQ: 1 REG: 2.660

3. \_\_\_\_\_ #: \_\_\_\_\_ NORMAL: \_\_\_\_\_ ESTIMATED/METH: \_\_\_\_\_ / \_\_\_\_\_ MAXIMUM/POT: \_\_\_\_\_  
PRI: \_\_\_\_\_ SEC: \_\_\_\_\_ EFF: \_\_\_\_\_ % NXT-TST: \_\_\_\_\_ (YYMMDD) FREQ: \_\_\_\_\_ REG: \_\_\_\_\_

4. \_\_\_\_\_ #: \_\_\_\_\_ NORMAL: \_\_\_\_\_ ESTIMATED/METH: \_\_\_\_\_ / \_\_\_\_\_ MAXIMUM/POT: \_\_\_\_\_  
PRI: \_\_\_\_\_ SEC: \_\_\_\_\_ EFF: \_\_\_\_\_ % NXT-TST: \_\_\_\_\_ (YYMMDD) FREQ: \_\_\_\_\_ REG: \_\_\_\_\_

5. \_\_\_\_\_ #: \_\_\_\_\_ NORMAL: \_\_\_\_\_ ESTIMATED/METH: \_\_\_\_\_ / \_\_\_\_\_ MAXIMUM/POT: \_\_\_\_\_  
PRI: \_\_\_\_\_ SEC: \_\_\_\_\_ EFF: \_\_\_\_\_ % NXT-TST: \_\_\_\_\_ (YYMMDD) FREQ: \_\_\_\_\_ REG: \_\_\_\_\_

6. \_\_\_\_\_ #: \_\_\_\_\_ NORMAL: \_\_\_\_\_ ESTIMATED/METH: \_\_\_\_\_ / \_\_\_\_\_ MAXIMUM/POT: \_\_\_\_\_  
PRI: \_\_\_\_\_ SEC: \_\_\_\_\_ EFF: \_\_\_\_\_ % NXT-TST: \_\_\_\_\_ (YYMMDD) FREQ: \_\_\_\_\_ REG: \_\_\_\_\_