

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 102011-009

Project Number: 2011-01-001
Installation Number: 207-0014

Parent Company: Nestle Purina PetCare Company

Parent Company Address: Checkerboard Square - 2B, St. Louis, MO 63165-001

Installation Name: Nestle Purina PetCare Company, Golden Products Division

Installation Address: 22450 East State Hwy Y, Bloomfield, MO 63825

Location Information: Stoddard County, S28, T27N, R11E

Application for Authority to Construct was made for:

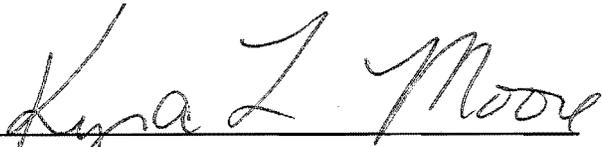
Construction of a new dryer, dry screen and ancillary conveyors. This new equipment will debottleneck existing equipment at the installation. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

OCT 17 2011

EFFECTIVE DATE



DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Departments' Air Pollution Control Program of the anticipated date of start up of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

Page No.	3
Permit No.	
Project No.	2011-01-001

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Nestle Purina PetCare Company, Golden Products Division
Stoddard County, S28, T27N, R11E

1. Annual Emission Limitations
 - A. Nestle Purina PetCare Company, Golden Products Division shall limit emissions below the rates listed in Special Condition 1.A(1) in any consecutive 12-month period from the emission points listed in Special Condition 1.A(2).
 - (1) Emission Rates
 - (a) 37.77 tons of particulate matter less than 10.0 micrometers in diameter (PM₁₀). This limit includes condensable particulate matter.
 - (b) 24.14 tons of particulate matter less than 2.5 micrometers in diameter (PM_{2.5}). This limit includes condensable particulate matter.
 - (c) 80.44 tons of nitrogen oxides (NO_x).
 - (d) 40.24 tons of sulfur dioxides (SO_x).
 - (2) Emission Points
 - (a) Strip Mining (EP-1)
 - (b) Haul Road Mine to Pit (EP-2)
 - (c) Raw Clay Crushing (EP-3)
 - (d) Clay Conveying (EP-4)
 - (e) Rotary Dryer (EP-5)
 - (f) Clay Processing (EP-6)
 - (g) Unloading-Rail Car Pits (EP-11, EU-1826)
 - (h) Unloading-Rail Car Pits (EP-11, EU-2674)
 - (i) Unloading Conveyor (EP-11, EU-2316)
 - (j) Unloading Belt Scale (EP-11, EU-2317)
 - (k) Storage Bin (EP-11, EU-1886)
 - (l) Scraper/Truck Unloading (EP-15)
 - (m) Avert Raw Clay Transfer (EP-18)
 - (n) Avert Haul Road (EP-19)
 - (o) Belt Conveyor Transfer Point (EP-20, EU-1812)
 - (p) Bentonite Receiver (EP-20, EU-3151)
 - (q) Belt Conveyor Transfer Point (EP-20, EU-3174)

Page No.	4
Permit No.	
Project No.	2011-01-001

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- (r) Conveyor between Storveyor and Shuttle (EP-20, EU-3192)
- (s) Seed Shuttle Conveyor (EP-20, EU-3193)
- (t) Coater Storveyor (EP-20, EU-3194)
- (u) Splits between E Coaters and F Coaters (EP-20, EU-3195)
- (v) Splits between 1E and 2E (EP-20, EU-3196)
- (w) Splits between 1F and 2F (EP-20, EU-3197)
- (x) Dryer C Storveyor (EP-20, EU-3201)
- (y) Coater Recycle Conveyor (EP-20, EU-3202)
- (z) Dryer Receiving Conveyor (EP-20, EU-3212)
- (aa) Belt Conveyor Transfer Point (EP-20, EU-3271)
- (bb) Conveyor B/W Storveyor and EX CNV1813
(EP-20, EU-3272)
- (cc) Material Blowers (EP-22, EU-3149, 3150, 3153)
- (dd) Conveyors (EP-25, EU-3212, 3213, 3276)
- (ee) Dryer C (EP-29, EU-3207)
- (ff) Dry Screen Overs Recycle Conveyor (EP-30, EU-3203)
- (gg) Clod Catcher on Elevator Inlet (EP-30, EU-3213)
- (hh) Screw Conveyor on Aspiration Baghouse (EP-30, EU-3288)
- (ii) Dryer Shuttle Conveyor (EP-30, EU-3200)
- (jj) Storveyor to New System (EP-30, EU-3175)
- (kk) Elevator between Dryer and Dry Screen (EP-30, EU-3214)
- (ll) Finished Product Elevator (EP-30, EU-3224)
- (mm) Blend Back Elevator (EP-30, EU-3315)
- (nn) Coater E Reversible (EP-30, EU-3198)
- (oo) Coater E Reversible (EP-30, EU-3199)
- (pp) Coater F Reversible (EP-30, EU-3273)
- (qq) Coater F Reversible (EP-30, EU-3274)
- (rr) Dryer C Shuttle (EP-30, EU-3175)
- (ss) Coater 1E (EP-30, EU-3160)
- (tt) Coater 2E (EP-30, EU-3161)
- (uu) Coater 1F (EP-30, EU-3169)
- (vv) Coater 2F (EP-30, EU-3170)
- (ww) Dry Screen (EP-30, EU-3217)
- (xx) Engineered Litter Packaging (EP-26)
- (yy) Engineered Litter Railcar Unloading (EP-22)

- B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1.A.

Page No.	5
Permit No.	
Project No.	2011-01-001

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

2. Hourly Emission Limits

A. Nestle Purina PetCare Company, Golden Products Division shall comply with the emission limitations listed in Special Condition 2.A(1) from the emission points listed in Special Condition 2.A(2).

- (1) Emission Limits
 - (a) 0.37 pounds per hour of PM₁₀
 - (b) 0.37 pounds per hour of PM_{2.5}
 - (c) 0.057 g/dscm (0.025 gr/dscf) [from 40 CFR 60.732(a)]
- (2) Emission Points
 - (a) Dryer C (EP-29, EU-3207)

B. Nestle Purina PetCare Company, Golden Products Division shall limit emissions below the rates listed in Special Condition 2.A(1) from the emission points listed in Special Condition 2.A(2).

- (1) Emission Limits
 - (a) 7.09×10^{-4} pounds per hour of PM₁₀
 - (b) 5.07×10^{-4} pounds per hour of PM_{2.5}
 - (c) Table 2 to Subpart OOO—Stack Emission Limits for Affected Facilities With Capture Systems

Table 2 to Subpart OOO—Stack Emission Limits for Affected Facilities With Capture Systems

For * * *	The owner or operator must meet a PM limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf) ^a	An initial performance test according to §60.8 of this part and §60.675 of this subpart (40 CFR 60); and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e); and
		Monitoring of baghouses according to §60.674(c), (d), or (e) and §60.676(b).

^aExceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

- (2) Emission Points
 - (a) Dry Screen Overs Recycle Conveyor (EP-30, EU-3203)
 - (b) Clod Catcher on Elevator Inlet (EP-30, EU-3213)
 - (c) Screw Conveyor on Aspiration Baghouse (EP-30, EU-3288)
 - (d) Dryer Shuttle Conveyor (EP-30, EU-3200)
 - (e) Storveyor to New System (EP-30, EU-3175)

Page No.	6
Permit No.	
Project No.	2011-01-001

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- (f) Elevator between Dryer and Dry Screen (EP-30, EU-3214)
- (g) Finished Product Elevator (EP-30, EU-3224)
- (h) Blend Back Elevator (EP-30, EU-3315)
- (i) Coater E Reversible (EP-30, EU-3198)
- (j) Coater E Reversible (EP-30, EU-3199)
- (k) Coater F Reversible (EP-30, EU-3273)
- (l) Coater F Reversible (EP-30, EU-3274)
- (m) Dryer C Shuttle (EP-30, EU-3175)
- (n) Coater 1E (EP-30, EU-3160)
- (o) Coater 2E (EP-30, EU-3161)
- (p) Coater 1F (EP-30, EU-3169)
- (q) Coater 2F (EP-30, EU-3170)
- (r) Dry Screen (EP-30, EU-3217)

- C. Nestle Purina PetCare Company, Golden Products Division shall demonstrate compliance with the limits in Special Conditions 2.A and 2.B through testing in accordance with Special Condition 5.

3. Visible Emissions

- A. Stack S21 (the emission release point of Dryer C (EP-29, EU-3207) and associated control devices) shall exhibit less than or equal to 10 percent opacity; and, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.

- B. Table 2 to Subpart OOO—Stack Emission Limits for Affected Facilities With Capture Systems

Table 2 to Subpart OOO—Stack Emission Limits for Affected Facilities With Capture Systems

For * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e); and

Page No.	7
Permit No.	
Project No.	2011-01-001

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

For * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
		Monitoring of baghouses according to §60.674(c), (d), or (e) and §60.676(b).

C. Table 3 to Subpart OOO—Fugitive Emission Limits

Table 3 to Subpart OOO—Fugitive Emission Limits

For * * *	The owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671) * * *	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	7 percent opacity	12 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart; and Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and
			A repeat performance test according to §60.11 of this part and §60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.

Page No.	8
Permit No.	
Project No.	2011-01-001

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

4. Control Device Requirement-Baghouse

A. Nestle Purina PetCare Company, Golden Products Division shall control emissions from the equipment listed in Special Condition 3.A(1) through 3.A(19) using baghouses as specified in the permit application:

- (1) Dryer C (EP-29, EU-3207)
- (2) Dry Screen Overs Recycle Conveyor (EP-30, EU-3203)
- (3) Clod Catcher on Elevator Inlet (EP-30, EU-3213)
- (4) Screw Conveyor on Aspiration Baghouse (EP-30, EU-3288)
- (5) Dryer Shuttle Conveyor (EP-30, EU-3200)
- (6) Storveyor to New System (EP-30, EU-3175)
- (7) Elevator between Dryer and Dry Screen (EP-30, EU-3214)
- (8) Finished Product Elevator (EP-30, EU-3224)
- (9) Blend Back Elevator (EP-30, EU-3315)
- (10) Coater E Reversible (EP-30, EU-3198)
- (11) Coater E Reversible (EP-30, EU-3199)
- (12) Coater F Reversible (EP-30, EU-3273)
- (13) Coater F Reversible (EP-30, EU-3274)
- (14) Dryer C Shuttle (EP-30, EU-3175)
- (15) Coater 1E (EP-30, EU-3160)
- (16) Coater 2E (EP-30, EU-3161)
- (17) Coater 1F (EP-30, EU-3169)
- (18) Coater 2F (EP-30, EU-3170)
- (19) Dry Screen (EP-30, EU-3217)

B. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' employees may easily observe them.

C. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

D. Nestle Purina PetCare Company, Golden Products Division shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

E. Nestle Purina PetCare Company, Golden Products Division shall maintain an

Page No.	9
Permit No.	
Project No.	2011-01-001

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

operating and maintenance log for the baghouses which shall include the following:

- (1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
- (2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

5. Performance Testing

- A. Nestle Purina PetCare Company, Golden Products Division shall demonstrate compliance with the emission limitations in Special Condition 2 by testing in accordance with the appropriate method referenced in 10 CSR 10-6.030 *Sampling Methods for Air Pollution Sources*, Section (5) "Particulate Matter Emissions" for PM₁₀, PM_{2.5}, and condensable particulate matter.
- B. These tests shall be performed within 60 days after achieving the maximum production rate of the installation, but not later than 180 days after initial start-up for commercial operation and shall be conducted in accordance with the Stack Test Procedures outlined in Special Condition 4.A
- C. A completed Proposed Test Plan Form (enclosed) must be submitted to the Air Pollution Control Program 30 days prior to the proposed test date so that the Air Pollution Control Program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved by the Director prior to conducting the required emission testing.
- D. Two copies of a written report of the performance test results shall be submitted to the Director within 30 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required U.S. EPA Method for at least one sample run.
- E. The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations
- F. Testing for 40 CFR 60 Subparts OOO standards shall be done in accordance with the federal regulation. The permittee should also complete and submit a Proposed Test Plan Form to the Air Pollution Control Program 30 days prior to the proposed test dates for the NSPS so that the Air Pollution Control Program may

Page No.	10
Permit No.	
Project No.	2011-01-001

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved by the Director prior to conducting the required emission testing. The permittee shall determine compliance with the particulate matter standards in §60.672(a) as follows [from § 60.675 *Test methods and procedures.*]:

- (1) Method 5 of Appendix A-3 of this part or Method 17 of Appendix A-6 of this part shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5 (40 CFR part 60, Appendix A-3), if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.
- (2) Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions.

G. Testing for 40 CFR 60 Subpart UUU standards shall be done in accordance with the federal regulation. The permittee should also complete and submit a Proposed Test Plan Form to the Air Pollution Control Program 30 days prior to the proposed test dates for the NSPS so that the Air Pollution Control Program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved by the Director prior to conducting the required emission testing. The permittee shall determine compliance with the particulate matter standards in §60.732 as follows [from §60.736 *Test methods and procedures.*]:

- (a) Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.
- (b) Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions.

6. Record Keeping and Reporting Requirements

A. Nestle Purina PetCare Company, Golden Products Division shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

Page No.	11
Permit No.	
Project No.	2011-01-001

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- B.** Nestle Purina PetCare Company, Golden Products Division shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2011-01-001
Installation ID Number: 207-0014
Permit Number:

Nestle Purina PetCare Company, Golden Products Division Complete: January 3, 2011
22450 East State Hwy Y
Bloomfield, MO 63825

Parent Company:
Nestle Purina PetCare Company
Checkerboard Square - 2B
St. Louis, MO 63165-001

Stoddard County, S28, T27N, R11E

REVIEW SUMMARY

- Nestle Purina PetCare Company, Golden Products Division has applied for authority to construct a new dryer, dry screen and ancillary conveyors. This new equipment will debottleneck existing equipment at the installation.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs are emitted as products of combustion and are below their screen modeling action levels.
- Some equipment in this project is subject to 40 CFR 60 Subparts OOO and UUU.
- None of the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- Baghouses are being used to control the PM, PM₁₀ and PM_{2.5} emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of all pollutants are below de minimis levels.
- This installation is located in Stoddard County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.

- Emissions testing is required for the equipment.
- A revised Intermediate Operating Permit application is required for this installation within 90 days of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Ralston acquired the Golden Cat Corporation, North America's leading marketer of cat box filler in 1995. Nestle Purina PetCare Company – Golden Products Division (formerly Ralston Purina Company) operates a pet absorbent products plant in Bloomfield, Missouri.

The Golden Products Bloomfield facility mines and processes clay to produce pet absorbent materials, such as cat litter. The facility has numerous pieces of equipment in series that handle in-process clay, e.g., elevators, conveyors, receiving bins, etc. An essential and integral part of the production process involves the removal of fines from the clay as it passes through the various production steps in order to meet product specifications. To enhance the removal of fines from the clay, the Bloomfield facility uses special devices called an aspirator (also referred to as "air ladders") at several locations throughout each production line. The aspirators are devices uniquely designed for the express purpose of pneumatically separating fines from the in-process clay. After passing an aspirator, the in-process clay is essentially free of fines. Fines picked-up at the aspirators and at various material transfer points along the production line, are aspirated to and removed by a common fabric filter collector (baghouse) prior to the air stream being discharged to atmosphere. It is important to emphasize that the primary function of this aspiration system, including the collector, is for fines removal to achieve strict product specifications which include a 99% dust free product, and not for emission control. This makes the collector an integral part of the process and not an emission control device. Nearly all of the fines removed from the processed clay are reworked as a raw ingredient in the Engineered Litter process.

The following permits have been issued to Nestle Purina PetCare Company, Golden Products Division from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
1093-013	Installation of a new dust collector.
1094-012	Installation of a Bemis bagger system as a replacement for the existing parson's machine.
0195-004	Installation of one (1) surge bin, four (4) bucket elevator, one (1) rotary blender, two (2) 30 ton/hr weigh belt feeders, two (2) conveyors and one (1) baghouse.
0495-004	Installation of two (2) 5'X12' Andritz Sprout Bauer screens, one (1) Conical Hammer mill, one (1) storage bin, two (2) vibrating feeders, one (1) All Fill rotary filler, two (2) conveyors and one (1) bucket elevator.

Permit Number	Description
0995-009	Installation of one (1) bucket elevator, one (1) belt conveyor, two (2) surge hoppers, one (1) belt conveyor, three (3) drag chain conveyors, one (1) belt system and one (1) spark sack unloading station.
0396-027	Modification of a pneumatic conveyor system and the installation of one (1) storage silo, two (2) enclosed belt conveyors and two (2) weigh belt feeders.
1296-005	Modification of an existing rotary dryer's emission control system.
1199-006	Modification of conventional processing area, replacement of elevators, and upgrading of aspirator system.
072000-010A	Amendment to Permit No. 072000-010
032001-014	Installation of a new silica gel packaging line and modification of their clumping process.
052001-025	Replacement of an existing dryer with a new, larger capacity rotary dryer and new material handling equipment associated with the dryer.
082002-018	Reopening of a surface clay mine at the Avert Mine Site.
032004-013	Addition of process equipment to recycle clay fines into an intermediate product.
052005-009	Modification to Permit Number 032004-013 by adding and replacing equipment to the Reconstituted Clay Process.
072005-046	added equipment in the Mill Area to increase the maximum process throughput from 95 tons per hour to 125 tons per hour. The project includes adding transfer equipment, a granules storage bin, a dust mill, and two new ASB Screens. The new equipment will be located indoors and will all aspirate to the two Mill baghouse units.

PROJECT DESCRIPTION

Nestle Purina PetCare Company, Golden Products Division has applied for authority to expand their engineered litter manufacturing line. The expansion will involve construction a third fluid bed dryer, dry screen, and material handling equipment. The new equipment will debottleneck the clay mine, the raw material handling equipment, the finished product handling equipment, and the bagging line. Nestle Purina PetCare Company, Golden Products Division has requested that the process flow diagram, maximum hourly design rates, and emission factors be made confidential.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition. Emissions from fugitive material handling equipment were calculated using emission factors from Section 13.2.5, "Aggregate Handling and Storage Piles," November 2006. Emissions from combustion sources were calculated using emission factors from Chapter 1, "External Combustion Sources." Emissions from the dryer and other sources controlled by baghouses were based on test results from similar units and will be verified through stack testing. Existing potential emissions were taken from permit 072005-046. The emissions increase of the application was determined by calculating the potential emissions of the new and debottlenecked

equipment and subtracting the baseline actual emissions of the debottlenecked equipment. In cases where the emissions increase was greater than de minimis levels for a particular pollutant, emissions from the new and debottlenecked equipment were limited so that the emissions increase would not exceed de minimis levels. The following table provides an emissions summary for this project.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2010 EIQ)	Emissions Increase of the Application	Project Conditioned Potential
PM _{2.5}	10.0	N/D	N/D	22.66	< 24.14
PM ₁₀	15.0	93.44	75.01	27.16	< 37.77
SO _x	40.0	< 100	0.31	99.86	< 40.24
NO _x	40.0	< 100	67.58	80.44	< 80.44
VOC	40.0	9.2	2.86	4.29	N/A
CO	100.0	79.66	43.40	41.45	N/A
HAPs	10.0/25.0	9.5	N/D	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels.

APPLICABLE REQUIREMENTS

Nestle Purina PetCare Company, Golden Products Division shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

The dryer is subject to NSPS Subpart UUU. All sources are aspirated to a fabric filter collector. Stack emissions from the fabric filter collector are subject to 10% opacity and 0.057 g/dscm (0.025 gr/dscf) per NSPS Subpart UUU. Compliance with the 10% opacity limit and the 0.025 gr/dscm will be demonstrated by Method 9 and Method 5.

Some equipment are subject to NSPS Subpart OOO. Emissions from any bin vents must comply with a 7% opacity limit. Fugitive emissions from product transfer points of belt conveyors and elevators subject to NSPS must comply with a 10% opacity limit as determined by Method 9 or Method 22 testing.

Equipment ID	Description	Subpart UUU	Subpart OOO
1812	Belt Conveyor Transfer Point		X
3151	Bentonite Receiver		X
3174	Belt Conveyor Transfer Point		X
3192	Conveyor between Storveyor and Shuttle		X
3193	Seed Shuttle Conveyor		X
3194	Coater Storveyor		X
3195	Splits between E Coaters and F Coaters		X
3196	Splits between 1E and 2E		X
3197	Splits between 1F and 2F		X
3201	Dryer C Storveyor		X
3202	Coater Recycle Conveyor		X
3212	Dryer Receiving Conveyor		X
3271	Belt Conveyor Transfer Point		X
3272	Conveyor B/W Storveyor and EX CNV1813		X
3280	Screw Conveyor above Dry Screen		X
3149, 3150, 3153	Material Blowers		X
3212, 3213, 3276	Conveyors		X
3207	Dryer	X	
3203	Dry screen overs recycle conveyor		X
3213	Clod catcher on elevator inlet		X
3288	Screw conveyor on aspiration baghouse		X
3200	Dryer shuttle conveyor		X
3175	Storveyor to new systems		X
3214	Elevator between dryer and dry screen		X
3224	Finished product elevator		X
3315	Blend Back Elevator		X
3198	Coater E Reversible		X
3199	Coater E Reversible		X
3273	Coater F Reversible		X
3274	Coater F Reversible		X
3275	Dryer C Shuttle		X
3160	Coater 1E		X
3161	Coater 2E		X
3169	Coater 1F		X
3170	Coater 2F		X
3217	Dry Screen		X

The following tables from 40 CFR 60 Subpart OOO describe the requirements:

Table 1 to Subpart OOO—Exceptions to Applicability of Subpart A to Subpart OOO

Table 1 to Subpart OOO—Exceptions to Applicability of Subpart A to Subpart OOO

Subpart A reference	Applies to subpart OOO	Explanation
60.4, Address	Yes	Except in §60.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§60.676(k)).
60.7, Notification and recordkeeping	Yes	Except in (a)(1) notification of the date construction or reconstruction commenced (§60.676(h)).
		Also, except in (a)(6) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.8, Performance tests	Yes	Except in (d) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§60.675(c)), Method 9 (40 CFR part 60, Appendix A-4) observation is reduced from 3 hours to 30 minutes for fugitive emissions.
60.18, General control device	No	Flares will not be used to comply with the emission limits.

Table 2 to Subpart OOO—Stack Emission Limits for Affected Facilities With Capture Systems

Table 2 to Subpart OOO—Stack Emission Limits for Affected Facilities With Capture Systems

For * * *	The owner or operator must meet a PM limit of * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	0.05 g/dscm (0.022 gr/dscf) ^a	7 percent for dry control devices ¹	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e).
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf) ²	Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e); and

¹ The stack opacity limit and associated opacity testing requirements do not apply for affected facilities using wet scrubbers.

² Exceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

For * * *	The owner or operator must meet a PM limit of * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
			Monitoring of baghouses according to §60.674(c), (d), or (e) and §60.676(b).

Table 3 to Subpart 000—Fugitive Emission Limits

Table 3 to Subpart 000—Fugitive Emission Limits

For * * *	The owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671) * * *	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	10 percent opacity	15 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart.
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	7 percent opacity	12 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart; and Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and
			A repeat performance test according to §60.11 of this part and §60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
The emission fee is the amount established by the Missouri Air Conservation Commission

annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.

- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Randall E. Raymond
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated December 22, 2010, received January 3, 2011, designating Nestle Purina PetCare Company as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southeast Regional Office Site Survey, dated January 6, 2011.

Attachment A – 12-month rolling total record keeping

Nestle Purina PetCare Company, Golden Products Division

Project Number: 2011-01-001

Installation ID Number: 207-0014

Instructions: The permittee shall perform these calculations monthly. By the 10th of each month, the permittee shall fill in all the cells of the table with the appropriate tons of pollutant. The next to the last column on the right should be the previous month, and the 11 prior columns should be the 11 prior months. At the end of the table are the cells to be filled in with the totals of the 12-monthly totals for each pollutant. Each pollutant total should be less than its corresponding “Compliance Value”.

EU	Description	Pollutant	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Jul 2012	Aug 2012	Sep 2012	12-Month Total	
	Strip Mining	PM ₁₀														
		PM _{2.5}														
	Haul Road Mine to Pit	PM ₁₀														
		PM _{2.5}														
	Raw Clay Crushing	PM ₁₀														
		PM _{2.5}														
	Clay Conveying	PM ₁₀														
		PM _{2.5}														
	Rotary Dryer Duel Fuel (fuel oil and natural gas) fuel oil sulfur content 0.7%	PM ₁₀														
		PM _{2.5}														
		SO _x														
		NO _x														
	Clay Processing	PM ₁₀														
		PM _{2.5}														
	Avert Raw Clay Transfer	PM ₁₀														
		PM _{2.5}														
	Avert Haul Road	PM ₁₀														

EU	Description	Pollutant	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Jul 2012	Aug 2012	Sep 2012	12-Month Total
		PM _{2.5}													
	Scraper/Truck Unloading	PM ₁₀													
		PM _{2.5}													
1826	Unloading (Rail Car Pits)	PM ₁₀													
		PM _{2.5}													
2674	Unloading (Rail Car Pits)	PM ₁₀													
		PM _{2.5}													
2316	Unloading Conveyor	PM ₁₀													
		PM _{2.5}													
1880	Unloading Belt Scale	PM ₁₀													
		PM _{2.5}													
2317	Unloading Elevator	PM ₁₀													
		PM _{2.5}													
1886	Storage Bin	PM ₁₀													
		PM _{2.5}													
1812	Belt Conveyor Transfer Point	PM ₁₀													
		PM _{2.5}													
3151	Bentonite Receiver	PM ₁₀													
		PM _{2.5}													
3174	Belt Conveyor Transfer Point	PM ₁₀													
		PM _{2.5}													
3192	Conveyor between Storveyor and Shuttle	PM ₁₀													

EU	Description	Pollutant	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Jul 2012	Aug 2012	Sep 2012	12-Month Total
3193	Seed Shuttle Conveyor	PM _{2.5}													
		PM ₁₀													
3194	Coater Storveyor	PM _{2.5}													
		PM ₁₀													
3195	Splits between E Coaters and F Coaters	PM ₁₀													
		PM _{2.5}													
3196	Splits between 1E and 2E	PM ₁₀													
		PM _{2.5}													
3197	Splits between 1F and 2F	PM ₁₀													
		PM _{2.5}													
3201	Dryer C Storveyor	PM ₁₀													
		PM _{2.5}													
3202	Coater Recycle Conveyor	PM ₁₀													
		PM _{2.5}													
3212	Dryer Receiving Conveyor	PM ₁₀													
		PM _{2.5}													
3271	Belt Conveyor Transfer Point	PM ₁₀													
		PM _{2.5}													
3272	Conveyor B/W Storveyor and EX CNV1813	PM ₁₀													
		PM _{2.5}													

EU	Description	Pollutant	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Jul 2012	Aug 2012	Sep 2012	12-Month Total	
3280	Screw Conveyor above Dry Screen	PM ₁₀														
		PM _{2.5}														
3149, 3150, 3153	Material Blowers	PM ₁₀														
		PM _{2.5}														
3212, 3213, 3276	Conveyors	PM ₁₀														
		PM _{2.5}														
3207	Dryer	PM ₁₀														
		PM _{2.5}														
		NO _x														
		SO _x														
3203	Dry screen overs recycle conveyor	PM ₁₀														
3213	Clod catcher on elevator inlet	PM ₁₀														
3288	Screw conveyor on aspiration baghouse	PM ₁₀														
3200	Dryer shuttle conveyor	PM ₁₀														
3175	Storveyor to new systems	PM ₁₀														
3214	Elevator between dryer and dry screen	PM ₁₀														
3224	Finished product elevator	PM ₁₀														
3315	Blend Back Elevator	PM ₁₀														
3198	Coater E	PM ₁₀														

EU	Description	Pollutant	Oct 2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Jul 2012	Aug 2012	Sep 2012	12-Month Total
	Reversible														
3199	Coater E Reversible	PM _{2.5}													
3273	Coater F Reversible	PM _{2.5}													
3274	Coater F Reversible	PM _{2.5}													
3275	Dryer C Shuttle	PM _{2.5}													
3160	Coater 1E	PM _{2.5}													
3161	Coater 2E	PM _{2.5}													
3169	Coater 1F	PM _{2.5}													
3170	Coater 2F	PM _{2.5}													
3217	Dry Screen	PM _{2.5}													
	Engineered Litter Packaging	PM ₁₀													
		PM _{2.5}													
	Engineered Litter Railcar Unloading	PM ₁₀													
		PM _{2.5}													
											Compliance Values	37.77	Totals	PM ₁₀	
												24.14		PM _{2.5}	
												40.24		NO _x	
												80.44		SO _x	

Ms. Rene Holterman
Plant Manager
Nestle Purina PetCare Company, Golden Products Division
22450 East State Hwy Y
Bloomfield, MO 63825

RE: New Source Review Permit - Project Number: 2011-01-001

Dear Ms. Holterman:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Randy E. Raymond; org. Michael Mittermeyer, at the Department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:rrl

Enclosures

c: Southeast Regional Office
PAMS File: 2011-01-001

Permit Number: