



Corporate Office:
3404 Airway Blvd.
Amarillo TX 79118

Central Texas:
9855 FM 847
Dublin TX 76446

New Mexico:
203 East Main Street
Artesia NM 88210

January 6, 2023

Tracy Tomkins
Office of Pollution Control
Environmental Permits Division
PO Box 2261
Jackson, MS 39225
or
700 North State Street
Jackson, MS 39202
601/961-5171

Re: Notice of Intent and Nutrient Management Plan Update for Cal-Maine Foods, Inc., Hinds County Facility (CAFO Coverage No. MSG220049)

Dear Ms. Tomkins,

As required by the Multimedia General Pollution Control Permit, attached is the updated Notice of Intent (NOI) to include animal mortality incinerators at the facility under the direction/guidance of the State Veterinary of the Mississippi Board of Animal Health. Also included are the applicable updated sections of the Nutrient Management Plan regarding animal mortality handling. Should you have any questions or require additional information, please call Wil Webb/Cal-Maine Foods at 601-948-6813 or myself at 806-353-6123.

Sincerely,

Marsha Shoemaker
Consultant

Enclosures

Cc: Cal-Maine Foods – Hinds County Facility



CONCENTRATED ANIMAL FEEDING OPERATION GENERAL PERMIT NOTICE OF INTENT (CAFO NOI)



COVERAGE NUMBER: MSG22 0 0 4 9. The coverage number can be found at the bottom left corner of your previous Certificate of Coverage or in the subject heading of the Letter of Instruction for Re-coverage.

I. GENERAL INFORMATION

Facility Name: Edwards, Mississippi Commercial Egg Production Operations

Owner Name: Cal-Maine Foods, Inc.

Mailing Address - Street or P.O. Box: PO Box 168

City: Edwards State: MS Zip: 39066

Physical Site Address - Street (can not be a P.O. Box): 2695 Adams Lane

City: Edwards State: MS Zip: 39066

County: Hinds Latitude: 32deg 18' 17.73" N Longitude : 90deg 33' 40.36" W

Facility Telephone: (601) 852-4970 Fax: (601) 852-8225

Contact Cell No.: (601) 826-0557 Other: ()

Contact Email: wwebb@cmfoods.com

If Contract operation: Name of Integrator: n/a

II. CONCENTRATED ANIMAL FEEDING OPERATION CHARACTERISTICS

A. TYPE AND NUMBER OF ANIMALS (Check all that apply and indicate the number of animals)

<u>Type</u>	<u>No. In Open Confinement</u>	<u>No. Housed Under Roof</u>	<u>Type</u>	<u>No. In Open Confinement</u>	<u>No. Housed Under Roof</u>
<input type="checkbox"/> Swine (55 lbs. or over)	_____	_____	<input type="checkbox"/> Dairy Cows	_____	_____
<input type="checkbox"/> Swine (under 55 lbs.)	_____	_____	<input type="checkbox"/> Heifers	_____	_____
<input type="checkbox"/> Chickens (broilers)	_____	_____	<input type="checkbox"/> Veal Calves	_____	_____
<input checked="" type="checkbox"/> Chickens (layers)	<u>0</u>	<u>1,611,190</u>	<input checked="" type="checkbox"/> Other: Specify	<u>0</u>	<u>200,000 (Breeders)</u>
<input type="checkbox"/> Cattle (not dairy or veal calves)	_____	_____		<u>0</u>	<u>799,000 (Pullets)</u>

B. MANURE, LITTER, AND/OR WASTEWATER PRODUCTION AND USE

1. How much manure, litter, and wastewater is generated annually by the facility? 19,478 tons or 101,203,697 gallons
2. How many acres of land, under the control of the applicant, are available for land application? 1,133 acres
3. How many tons of manure or litter, or gallons of wastewater produced by the CAFO will be transferred annually to other persons? approximately 19,478 tons approximately 17,000,000 gallons

II. CONCENTRATED ANIMAL FEEDING OPERATION CHARACTERISTICS (CONTINUED)

C. TYPE OF CONTAINMENT, STORAGE AND CAPACITY FOR MANURE, LITTER AND PROCESS WASTEWATER (Check all that apply and indicate total days of storage and their capacity)

Type	Total Capacity (in gallons)	Type	Total Capacity (in gallons)
<input checked="" type="checkbox"/> Anaerobic Lagoon	120 days each - 111,884,199 gals	<input checked="" type="checkbox"/> Storage Lagoon	n/a days - 109,997,522 gals
<input type="checkbox"/> Roofed Storage Shed	_____	<input type="checkbox"/> Concrete Pad	_____
<input type="checkbox"/> Impervious Soil Pad	_____	<input checked="" type="checkbox"/> Other: Specify	Underfloor Pits
			1460 days storage each,
			4,216 tons of dry manure

D. NUTRIENT MANAGEMENT PLAN (NMP)

- Number of existing houses/barns: 48
Number of proposed houses/barns: 0
- Facility must have and provide a current Comprehensive Nutrient Management Plan (CNMP).
CNMP Development Date: Approved 02-04-2019 CNMP Expiration Date: 08-31-2023
- A topographic map of the geographic area, showing the production area and the land application fields, was submitted with the current NMP. Yes No

Note: The CNMP identified above expires five years from the date it was developed and an updated nutrient management plan must be submitted to MDEQ prior to its expiration date. This NOI is not complete unless a current NMP is either on file at the MDEQ office or a current NMP is submitted with this NOI.

III. CONSTRUCTION AND/OR OPERATION OF AN ANIMAL MORTALITY INCINERATOR

No, there will be no mortality incineration equipment located at the facility. If at a future date you wish to construct and/or operate mortality incineration equipment, you must submit an updated Multimedia CAFO GP NOI, completing sections III and V of this NOI and Appendix A. Constructing and operating mortality incineration equipment without written notification of a modified coverage or issuance of individual permits is a violation of state law.

Yes, there will be mortality incineration equipment located at the facility. Complete Section III.

MANUFACTURER'S INFORMATION

Manufacturer Name: National Incinerator Inc.

Model Number: The Destructor

Capacity (tons/hour): 125 lbs/hr (capacity is 500 lbs)

TYPE OF INCINERATOR

Single Chamber

Multiple Chamber

Other, describe _____

TOTAL NUMBER OF INCINERATORS AND THEIR DATES OF CONSTRUCTION

Total number of incinerators on site: 2

1. Manufacture Date: <u>to be installed 2/2023</u>	Latitude: <u>32.3014</u>	Longitude: <u>-90.5592</u>
2. Manufacture Date: <u>to be installed 2/2023</u>	Latitude: <u>32.2569</u>	Longitude: <u>-90.5500</u>
3. Manufacture Date: _____	Latitude: _____	Longitude: _____

IV. CERTIFICATION

Note: This NOI shall be signed according to the Multimedia CAFO GP, ACT8, Condition T-16, as follows:

- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.

I understand that my nutrient management plan identified Section II. D. expires five years from the date it was developed and that an updated nutrient management plan must be submitted to MDEQ prior to its expiration date.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that the project continues as described in the original notice of intent. Also, I certify that I understand when coverage is terminated I am no longer authorized to operate activities identified under this general permit and to do so without proper permit coverage is in violation of state law.



Signature of Responsible Official

Wil Webb

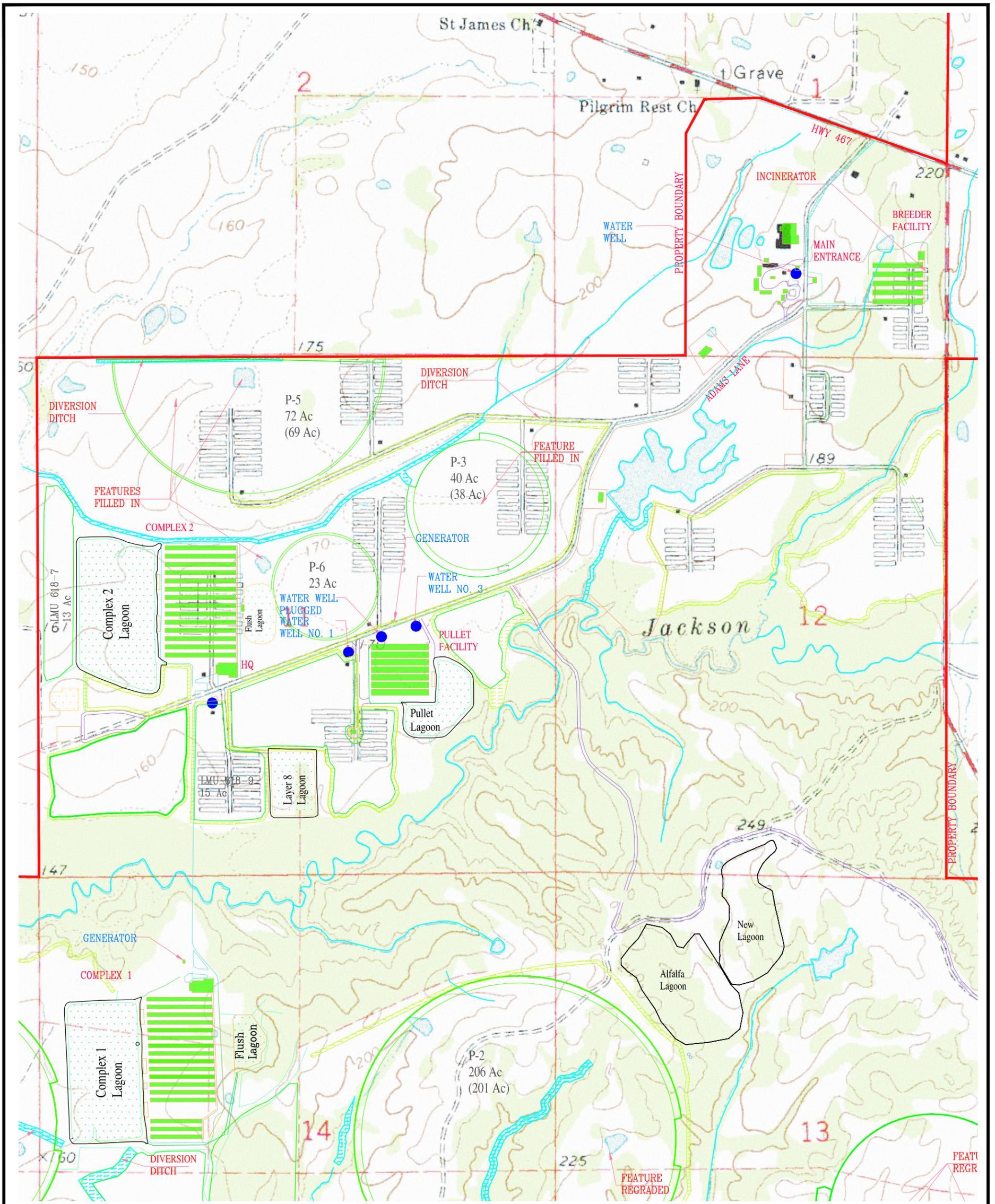
Name of Responsible Official (Printed or Typed)

1-6-2023

Date

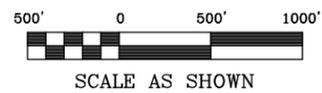
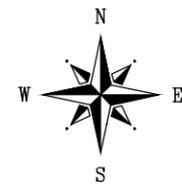
VP

Title



LEGEND:

- Denotes Water Well
- Denotes Well w/100 or 150-ft Buffer and/or BMPs
- Denotes Barns/Roofed Areas
- ▨ Denotes Surface Water/Drainage Feature Buffer
- ▨ Denotes Vegetative Strip



Source: USDA Geospatial Data Gateway.

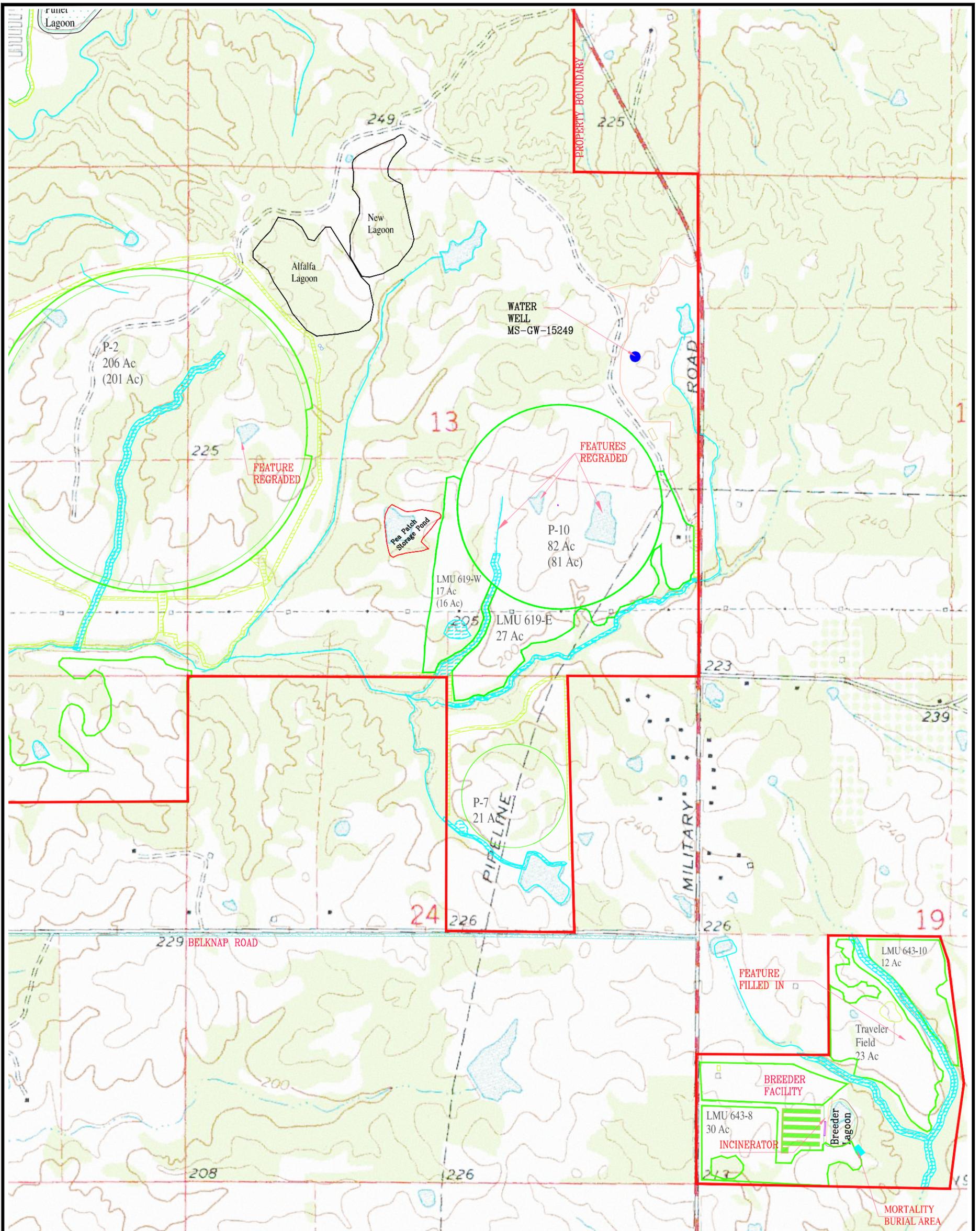
- 35-ft buffer from surface water features will be maintained when applying wastewater onsite.

Cal-Maine Foods, Inc.
Edwards, MS
Hinds County

USGS Map
Figure 2.3a - Page 6
Revised - 12/19/22



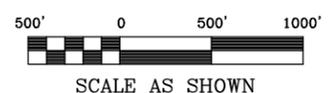
Enviro-Ag Engineering, Inc.
ENGINEERING CONSULTANTS
3404 Airway Boulevard
AMARILLO, TEXAS 79118
TEL (806) 353-6123 FAX (806) 353-4132



LEGEND:

- Denotes Water Well
- Denotes Well w/100 or 150-ft Buffer and/or BMPs
- Denotes Barns/Roofed Areas
- ▨ Denotes Surface Water/Drainage Feature Buffer
- ▨ Denotes Vegetative Strip

NOTE: Mortality/Catastrophic Burial Area located south of Breeder Lagoon.



SCALE AS SHOWN

Source: USDA Geospatial Data Gateway.

- 35-ft buffer from surface water features will be maintained when applying wastewater onsite.

Cal-Maine Foods, Inc.
Edwards, MS
Hinds County

USGS Map
Figure 2.3c - Page 8
Revised- 12/19/22



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3.2.7 Storage Structures

The facility can utilize one, two, three or four storage structures (Layer 8 Lagoon, Alfalfa Lagoon, New Lagoon and Pea Patch Lagoon) on the property that allow the facility to pump wastewater from the facility complexes to the storage lagoons prior to land application. The use of these storage structures enables the facility to apply more wastewater to the LMUs by reducing its nutrient loading through nitrogen volatilization and phosphorus settling.

3.2.8 Facility Certifications

The retention ponds have been certified by a Mississippi Professional Engineer for soil liner and capacity. These certifications for each retention pond are maintained on-site.

3.3 Clean Water Diversion

The facility will ensure that clean water is diverted, as appropriate, from the production area, treatment lagoons and wastewater storage lagoons. All stormwater is diverted away from the lagoons by design or natural topography. The following describes best management practices utilized to ensure clean water is diverted.

3.3.1 Complex 1 Production Area

Area drains are utilized between houses to divert stormwater from the lagoon.

3.3.2 Complex 2 Production Area

Area drains are utilized between houses to divert stormwater from the lagoon.

3.3.3 Breeder Complex 1 Production Area

Area drains are utilized between houses to divert stormwater from the lagoon.

3.3.4 Pullet Complex 1 Production Area

Area drains are utilized between houses to divert stormwater from the lagoon.

3.3.5 Storage Lagoons

A berm/ditch is located around the Alfalfa and New Lagoons to divert clean water around each lagoon. The Layer 8 lagoon is elevated above natural ground level. The Pea Patch Lagoon is not currently in use, but permitted and available should the facility need the structure for storage. Upon use, the facility will monitor the storage structure levels and perform sampling.

3.4 Mortality Management

Mortalities must be disposed in accordance with all applicable requirements as set forth by the State Board of Animal Health. The mortality disposal methods include:

- Site specific Catastrophic Mortality Disposal Plans
- Grinding and storage of normal mortality in the concrete settling basin at Complex 2 as approved by the Mississippi Board of Animal Health (see MBAH permit and inspection reports in Section 12)
- Incinerators – Gas Burner incinerators at North and South Breeder Farms as a primary method of management and secondary would be grinding at Complex 2.

Cal-Maine Edwards has worked with the NRCS and MBAH to develop site specific catastrophic mortality disposal plans for each complex. All plans have been approved by the MBAH. Copies of the plans with location maps are maintained onsite. Burial will occur only during a catastrophic mortality event. Should a catastrophic die-off event occur, the Mississippi Board of Animal Health and the MDEQ will be notified and efforts coordinated between these agencies to address this event.

Cal-Maine Edwards collects normal daily mortality from each complex (layer and pullet) and brings the carcasses to Complex 2 for processing. The process consists of grinding the mortality with a commercial grinder and directing the ground mortality into the north concrete settling basin which is covered with a mesh tarp for vector control. Grinding is considered the most favorable option to dealing with normal mortality. The result is the solids are gathered and the recycling of nutrients to farm land. The manure and mortality solids are retained in the settling basin until the solids level approaches the maximum capacity of the basin (the flow line of the inlet pipe from the flush system). The historic solids clean-out interval ranges from four to five months. A sample of the settling basin solids is collected and analyzed at least annually for nutrients contained in manure and is made available to off-site recipients when basin cleaning occurs. Liquid from the flushing of manure and mortality grinding is allowed to flow through the concrete settling basin into the Complex 2 lagoon. Forms for monthly mortality management is included in Section 10.

The normal mortality rate is based on the poultry industry’s weekly average for each type of bird on the facility applied to the maximum capacity for each complex along with the contributing loading rate to the Complex 2 lagoon is shown in Table 3.4.1 – Volume and Characteristics of Mortality:

Table 3.4.1: Volume and Characteristics of Mortality

Type/ Mortality Rate	Layers (0.15%)	Pullets (0.30%)	Breeders (0.23%)	Totals
Avg Wt.	3.0	1.5	3.1	
Total Hd	1,611,190	799,000	200,000	2,610,190
Annual Mortality	125,673	124,644	23,920	274,237
Pounds/Yr	377,018	186,966	74,152	638,136
Gal Wtr/Yr (1)	29,566	14,662	Primary Method - Incinerators Secondary Method - Grinders at Complex 2	44,227
VS/Yr (2)	143,267	71,047		214,314
VS/Day	393	195		587 or Max 664 with Breeders

(1) Based on carcass comprised of 35% solids

(2) Based on 38% of carcass weight is comprised of Volatile Solids

The volatile solids (VS) along with the moisture content of the mortality impact the Complex 2 lagoon due to the additional treatment volume for the VS production (587 lb VS/day) and the 2,396 gallons/month liquid volume comprising the carcasses. Table 3.4.2 depicts the “Impact of Mortality Management on Complex 2 Lagoon Capacity Requirements”:

Table 3.4.2: Impact of Mortality Management on Complex 2 Lagoon Capacity Requirements

Treatment Volume Requirement	587 Pounds VS/Day Produced	(0.0052 lb-VS/cf/day) VS Loading Rate	2.07 ac-ft
Storage Volume Requirement	44,227 gal/yr 3,686 gal/mo 121 gal/day	120 day storage allowance	0.04 ac-ft
Additional Capacity Required from Mortality			2.11 ac-ft (2.41 ac-ft based on secondary method with breeder farms included)
Calculated Capacity Requirement for Complex 2 Lagoon (1)			99.2 ac-ft
Measured Capacity of Complex 2 lagoon			178.71 ac-ft

(1) See Table 3.2.3b spreadsheet for calculation details

3.5 Prevention of Direct Contact of Animals with Waters of the United States

Animals confined at the CAFO shall not be allowed to come into direct contact with waters of the United States. The poultry at Cal-Maine Foods are housed in total confinement barns and are not allowed to roam free.

3.6 Chemical and other Contaminant Handling

The CAFO takes the following precautions to ensure the proper handling and disposal of chemicals and other contaminants used on site.

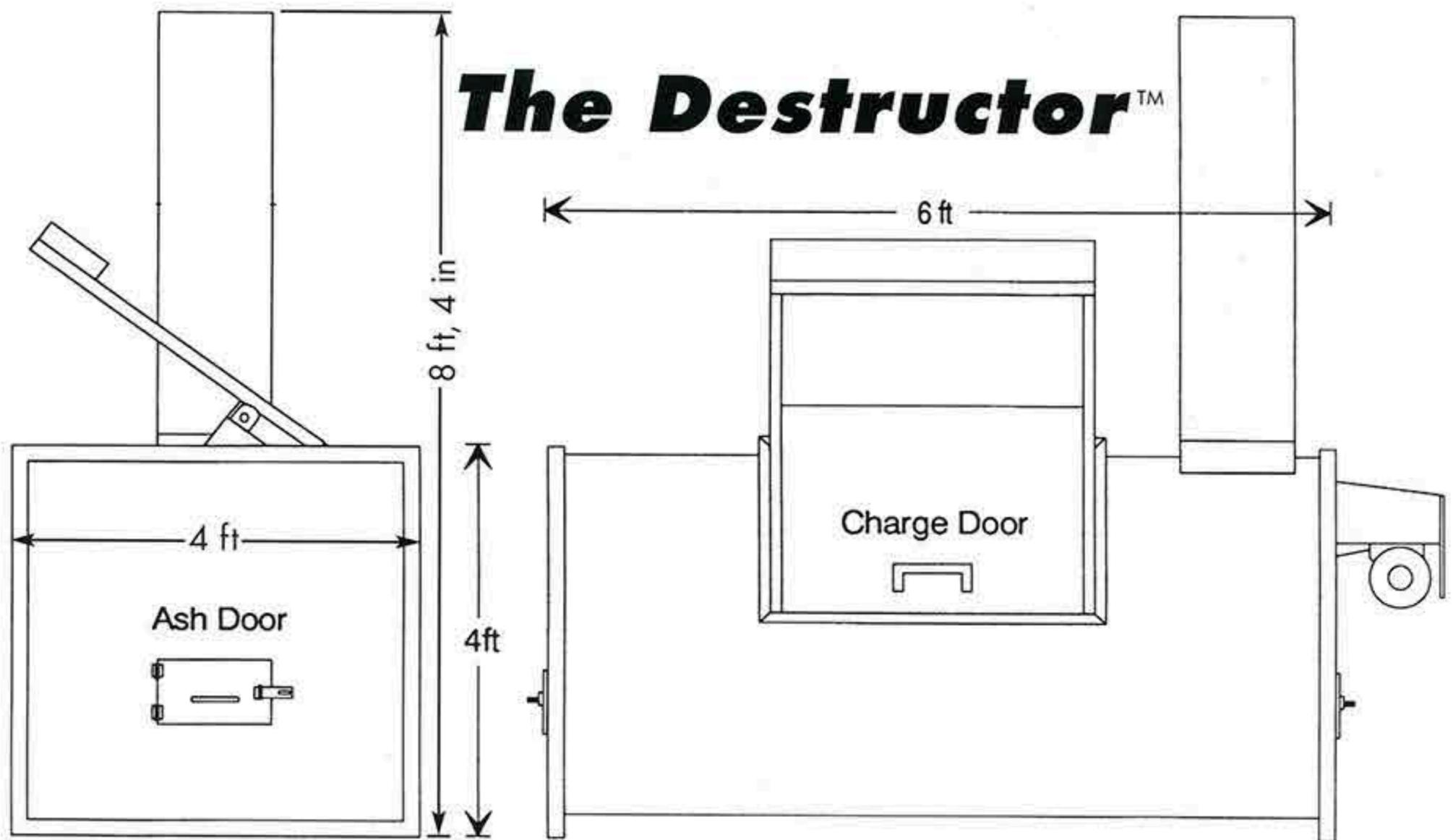
Applicable BMPs include:

- Chemicals are stored inside the Egg Processing Plant, Poultry Houses and Maintenance area.
- All chemicals are stored in proper containers.
- Empty containers are properly disposed of in accordance with manufacturer’s recommendations; in compliance with local, state and federal regulations.
- Chemicals are stored so that no drains or other direct pathways that will allow spilled chemicals to exit the storage area.
- Emergency equipment is in place to contain and clean up spills and is located at the following locations:
 - Truck Shop
 - Complex 1
 - Breeder Complex 1
 - Yellow Maintenance Shop

3.7 Production Area Standard Operating Procedures

A Standard Operating Procedure (SOP) was developed that provides guidelines for standardized inspections of the production area to minimize discharges and document the results of the inspections and any corrective measures resulting from these inspections. The SOP is included in Section 11 of the NMP.

The Destructor™



Guarantee

Every unit built by National Incinerator is constructed of the highest quality materials and built by skilled technicians. National's know-how builds into each incinerator bearing their label the assurance of long life and trouble-free operation.

Warranty

National Incinerator, Inc. guarantees all materials and workmanship used in the construction of its incinerator including the refractory for a one year period from date of installation. All purchased electrical parts such as burners, fans, timers, and other controls will carry the applicable manufacturer's guarantee of 90 days. Seller shall not be liable for any injury or damage to person or property or any other incidental or consequential damages.

Specifications

Height: 8'4" **Length:** 6' **Width:** 4'

Weight: 6,000 lbs.

Metal: 11 gauge **Lining:** 5-inch 3000° refractory

Poultry

Charge Door: 17" x 24" **Lining:** 4" 3,000° refractory

Swine

Charge Door: 17" x 36" **Lining:** 4" 3,000° refractory

Stack: 4'-4" **Lining:** 2-inch refractory lining

Ash Door: 6" x 11" (both ends)

Lining: 2-inch 3000° refractory

Grates: 30" x 8" (6 grates per unit)

Burner: 300,000 BTU incinimite with cover
Second burner available upon request

Clean-out Rod: 60" long

Timer: 6 hour



NATIONAL INCINERATOR INCORPORATED

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BOAZ, AL 35957

(205) 589-6720 • FAX (205) 589-2326