



**AUTHORIZATION TO OPERATE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOs)**

**NPDES PERMIT NO: PAI120502
Amendment No. 1**

In compliance with the provisions of the Pennsylvania Clean Streams Law, 35 P.S. Section 691.1 et seq. ("the State Act"), and the federal Clean Water Act, 33 U.S.C. Section 1251 et seq. ("the Federal Act")

**Inguran LLC dba ST Genetics
1141 State Road
Lincoln University, PA 19352**

(hereinafter "permittee") is hereby authorized to operate a Concentrated Animal Feeding Operation (CAFO) located in **New London Township, Chester County** in Watershed **7-K**, in accordance with all limitations, monitoring, reporting, record-keeping requirements, and other special conditions set forth in Parts A, B, and C of the Permit. The CAFO contains **1,288.03** AEU's and the CAFO shall only make changes to the AEU's consistent with this permit and the Nutrient Management Plan (NMP) for the CAFO.

THIS PERMIT SHALL BECOME EFFECTIVE ON February 1, 2015

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON January 31, 2020

The CAFO contains the following animal types and numbers based on the current approved NMP:

Mature Dairy Cows	<u>872</u>	Chickens (Broilers)	<u> </u>	Sheep or Lambs	<u> </u>
Dairy Heifers	<u>80</u>	Chickens (Layers)	<u> </u>	Horses	<u> </u>
Veal Calves	<u> </u>	Turkeys	<u> </u>	Ducks	<u> </u>
Swine (55 lbs or over)	<u> </u>	Cattle (not dairy or veal calves)	<u> </u>		
Swine (under 55 lbs)	<u> </u>	Other	<u>325</u>		

Entrance to Production Area: Latitude 39° 46' 24.0000" Longitude -75° 53' 6.0000"

The authority granted by this Permit is based in part on the information provided with the permit application and supporting documents including, but not limited to, the Nutrient Management plan (NMP) submitted to the Department requesting coverage under this Permit and is subject to the following:

1. If there is a conflict between the permit application, its supporting documents and/or amendments, and the terms and conditions of this Permit, the terms and conditions of this Permit shall apply. All supporting documents and/or amendments must be submitted with the application for review.
2. Failure to comply with the terms, conditions, or effluent limitations of this Permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of an application seeking continued coverage. Any Permit non-compliance constitutes a violation of the State Act and the Federal Act.
3. A complete application seeking continued coverage under this Permit shall be submitted to the Department on or before the renewal application due date (180 days prior to expiration of the Permit) specified below (unless permission has been granted by the Department for submission at a later date), using the appropriate NPDES permit application form.

4. In the event that a timely and complete application seeking continued coverage under this Permit has been submitted and the Department is unable, through no fault of the permittee, to reissue the Permit before the expiration date below, the terms and conditions of this Permit will be automatically continued, and this Permit will remain fully effective and enforceable pending the approval or denial of the pending application as long as the permittee is and remains in compliance with the terms and conditions of this Permit.
5. This Permit does not constitute an authorization to construct or make modifications to wastewater storage facilities necessary to meet the terms and conditions of this Permit or to construct any building or structure on permittee's facility.

DATE PERMIT ISSUED	<u>January 29, 2015</u>	ISSUED BY	<u>/s/</u>
DATE PERMIT AMENDMENT ISSUED	<u>December 28, 2016</u>		Maria D. Bebenek, P.E.
RENEWAL APPLICATION DUE DATE	<u>July 31, 2019</u>		Clean Water Program Manager
			Southcentral Regional Office



AUTHORIZATION TO OPERATE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOs)

Who may be covered under this permit? An individual permit applies to operations for which animals (other than aquatic animals) have been, are or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period. Agricultural operations may be covered by the individual permit when one or more of the following conditions exist:

- a. The discharge, individually or in combination with other similar discharges, is or has the potential to be a contributor of pollution, as defined in the State Act, which is more appropriately controlled under an individual permit.
- b. The discharger is not, or will not be, in compliance with any one or more of the conditions of the permit.
- c. The applicant has failed and continues to fail to comply or has shown a lack of ability or intention to comply with a regulation, permit, schedule of compliance or order issued by the Department.
- d. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source.
- e. Categorical point source effluent limitations are promulgated by the EPA for those point sources covered by the permit.
- f. The discharge is not, or will not, result in compliance with an applicable effluent limitation or water quality standard.
- g. Other point sources at the facility require issuance of an individual permit, and issuance of both an individual and a General Permit for the facility would constitute an undue administrative burden on the Department.
- h. The Department determines that the action is necessary for any other reason to ensure compliance with the Federal Act, the State Act or this title.
- i. The discharge would be to a surface water classified as a High Quality Water or an Exceptional Value Water under 25 Pa. Code Chapter 93.

Effluent Limitation Guidelines (ELG) Covered by this Permit. CAFOs are not allowed to discharge pollutants from the production areas to surface water or to groundwater except whenever rainfall events cause an overflow of agricultural process wastewater from a facility designed, constructed, operated and maintained to contain all process-generated wastewaters plus the runoff from the design storm at the location of the facility. The applicable design storm for the basic animal types are:

<u>Animal types</u>	<u>Applicable Design Storm ELG</u>
Horses and/or Sheep	25 year - 24 hour rainfall
Ducks	Numeric limitations specified in 40 CFR § 412.22
Dairy Cows, and/or Cattle other than Veal	25 year - 24 hour rainfall
Swine, Veal and/or Poultry (on or before April 14, 2003)	25 year - 24 hour rainfall
Swine, Veal and/or Poultry (after April 14, 2003)	100 year - 24 hour rainfall

For dairy, beef cattle, veal calves, swine and poultry, ELGs also apply to land areas on which manure, litter, and agricultural wastewater is applied as listed in 40 CFR § 412.4. These ELGs are met by implementing an approved Nutrient Management Plan (NMP) that incorporate practices to manage the use of plant nutrients for crop production and water quality protection in accordance with 25 Pa Code Chapter 83, Subchapter D (relating to nutrient management) and 40 CFR § 122.42(e)(1)(i-ix).

Permit Modifications – Major modifications to this permit shall be completed in accordance with 40 CFR § 122.62.

Major permit modifications require that the permit be publically noticed. Major modifications include, but are not limited to:

- a) Material and substantial alterations or additions to the permitted facility or activity that occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.
- b) New information becomes available that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.
- c) Standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued as specified in 40 CFR § 122.62(3).
- d) Good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonably available remedy. However, in no case may an NPDES compliance schedule be modified to extend beyond an applicable Federal Act statutory deadline.
- e) Technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions.

Minor modifications to the permit shall be completed in accordance with 40 CFR § 122.63. Minor permit modifications do not require public notice of the permit. Minor modifications include:

- a) Correcting typographical errors;
- b) Requiring more frequent monitoring or reporting requirements;
- c) Changing interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement;
- d) Allowing for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director; and
- e) Incorporating changes to the terms of a CAFO's nutrient management plan that have been revised in accordance with the requirements of Chapter 83, Subchapter D (relating to nutrient management) and 40 CFR § 122.42(e)(6).

GENERAL PROVISIONS

This Permit authorizes the permittee to operate a CAFO subject to: the limitations, monitoring, reporting, record-keeping requirements, and other permit conditions as set forth in this Permit.

New operations that will be CAFOs may not populate the operation with animals until the Department authorizes coverage under this Permit based upon both of the following:

- (1) The applicant has submitted a complete permit application in accordance with 40 CFR § 122.21, using an application form provided by the Department (or photocopy thereof). The Department may require additional information pertinent to the operation as part of the application process.
- (2) The applicant has obtained authorization to operate under this Permit.

The Department may deny coverage under this Permit in accordance with 25 Pa. Code § 92a.54(e) of its regulations.

ADDITIONAL PROVISIONS

The authority granted by this Permit is further subject to the following conditions:

1. This Permit may be renewed, modified, suspended, terminated, or revoked and reissued by the Department.
2. This Permit expires on the date specified on Page 1 of this Permit.
3. The Department will publish a notice in the Pennsylvania Bulletin of the draft renewed, modified, or reissued permit before it expires. After a comment period specified in the notice of draft permit, a notice of final renewal, modification, or reissuance of the permit will be published in the Pennsylvania Bulletin.
4. Exceeding the AEUs allowed in the Nutrient Management Plan (NMP) is a violation of this permit. See Part C I, Special Requirements A, Nutrient Management Plans. The permittee must notify the Department in writing of any proposed change in AEUs greater than ten percent (10%) of the number of AEUs listed in the NMP and shall describe the proposed changes. This notification shall be submitted at least 45 days prior to implementing the proposed change unless a shorter period of time is approved by the Department in writing. A proposed increase in the AEUs managed on the facility may require an amendment to the permit. Any permit amendment or NMP amendment required for a proposed increase in AEUs must be approved before the animal population is increased.
5. It is unlawful for this permittee to discharge pollutants to waters of this Commonwealth except as allowed by applicable state or federal regulations or this permit.
6. No condition of this Permit shall release the permittee from any responsibility or requirements under other federal or Pennsylvania environmental statutes or regulations.

PART A

I. EFFLUENT LIMITATIONS, SELF-MONITORING AND RECORD KEEPING REQUIREMENTS

A. Definitions

1. **25-year, 24-hour Storm** – the maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," and subsequent replacements, or equivalent regional or state rainfall probability information developed there from.
2. **100-Year, 24-Hour Storm** – the maximum 24-hour precipitation event with a probable recurrence interval of once in 100 years, as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," and subsequent replacements, or equivalent regional or state rainfall probability information developed there from.
3. **Agricultural process wastewater** – wastewater from agricultural operations including from spillage or overflow from livestock or poultry watering systems; washing, cleaning or flushing pens, milk houses, barns, manure pits, or other facilities associated with the CAFO or AFO operation; silage leachate; direct contact swimming, washing or spray cooling of livestock or poultry; egg washing; or dust control. Agricultural process wastewater includes any water which comes into contact with any raw materials, products, or byproducts, including manure, litter, feed, milk, eggs and bedding.
4. **Animal equivalent unit (AEU)** – one thousand pounds live weight of livestock or poultry animals on an annualized basis, regardless of the actual number of individual animals comprising the unit.
5. **Animal feeding operation (AFO)** – a federal definition for a lot or facility (other than an aquatic animal production facility) where animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.
6. **Animal heavy use area** – a barnyard, feedlot, loafing area, exercise lot, or other similar area on an agricultural operation where due to the concentration of animals it is not possible to establish and maintain vegetative cover of a density capable of minimizing accelerated erosion and sedimentation by usual planting methods; The term does not include entrances, pathways and walkways between areas where animals are housed or kept in concentration.
7. **Agricultural stormwater** – a precipitation-related discharge of manure, litter or agricultural process wastewater from land areas under the control of a CAFO is an agricultural stormwater where the manure, litter or agricultural process wastewater has been applied in accordance with site specific nutrient management practices as specified in 40 CFR §122.42(e)(1)(vi)–(ix) that ensure appropriate agricultural utilization of the nutrients in the manure, litter or agricultural process wastewater.
8. **Best management practices (BMPs)** – schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution to surface waters of the Commonwealth. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
9. **Concentrated animal feeding operations (CAFO)** – for the purposes of this permit, a CAO with greater than 300 AEUs, any agricultural operation with greater than 1,000 AEUs, or any agricultural operation defined as a large CAFO under 40 CFR § 122.23 (relating to concentrated animal feeding operations). A CAFO may be a federally defined AFO that has been designated as a CAFO pursuant to 40 CFR § 122.23(c). This term also applies to the federal definition for small concentrated animal feeding operations and medium concentrated animal feeding operations listed in this section.

10. **Concentrated animal operations (CAOs)** – an agricultural operation that meets the criteria established by the State Conservation Commission (SCC) in Chapter 83, Subchapter D (relating to nutrient management).
11. **Erosion and sediment control plan (E&S Plan)** – a site-specific plan consisting of both drawings and a narrative that identifies BMPs to minimize accelerated erosion and sedimentation before, during and after earth disturbance activities pursuant to 25 Pa Code Chapter 102.
12. **Freeboard** – The vertical distance between the level of manure in a manure storage facility and the maximum waste elevation that can be maintained without an overflow.
13. **Land application area** – Land under control of an AFO, whether it is owned, rented, or leased, to which manure, litter, or agricultural wastewater from the production areas is or may be applied.
14. **Large concentrated animal feeding operation** – federal classification for a large animal operation as defined in 40 CFR § 122.23.
15. **Manure** – animal excrement, including poultry litter, which is produced at an agricultural operation. Manure includes materials such as bedding, washwater, raw materials and other materials which are commingled with that excrement.
16. **Manure storage facility** – as defined in 25 Pa. Code § 91.36, a permanent structure or pond, or a portion of a structure or pond, or a group of structures or ponds at one agricultural operation, utilized for the purpose of containing manure or agricultural process wastewater. This includes concrete, metal or other fabricated tanks and underbuilding structures, as well as earthen and synthetically lined manure storage ponds, or other Manure Storage Facilities as defined in 25 Pa. Code § 83.201. Also included are digesters that utilize manure.
17. **Medium concentrated animal feeding operation** – federal classification for a medium animal operation as defined in 40 CFR § 122.23. It is illegal for a medium CAFO to discharge pollutants to waters of this Commonwealth except as allowed by applicable CAFO regulations or this permit.
18. **New source** – any building, structure, facility, or installation from which there is or may be a “discharge of pollutants,” the construction of which commenced after promulgation of standards of performance under section 306 of the Federal Act which are applicable to such source, or after proposal of standards of performance in accordance with section 306 of the Federal Act which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.
19. **Nutrient management plan (NMP)** – a written site-specific plan that incorporates management practices to manage the use of plant nutrients for crop production and water quality protection in accordance with Chapter 83, Subchapter D (relating to nutrient management) and 40 CFR § 122.42(e)(1)(i-ix).
20. **Overflow** – the discharge of manure or agriculture process wastewater resulting from the filling of agricultural wastewater or manure storage structures beyond the point at which no more manure, agricultural process wastewater, or agricultural storm water can be contained by the structure.
21. **Production area** – that part of an operation that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The animal confinement area includes, but is not limited to, open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milk rooms, milking centers, cow yards, barnyards, medication pens, walkers, animal walkways, and stables. The manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included are egg washing or processing facilities and areas used in the storage, handling, treatment, or disposal of mortalities.

22. **Setback** – a specified distance from surface waters or potential conduits to surface waters where manure, litter, and process wastewater may not be land applied. Examples of conduits to include but are not limited to: open tile line intake structures, sinkholes and agricultural well heads.
23. **Small concentrated animal feeding operation** – federal classification for a small animal operation as defined in 40 CFR § 122.23 It is illegal for a small CAFO to discharge pollutants to waters of this Commonwealth except as allowed by applicable CAFO regulations or this permit.
24. **Vegetative buffer** – a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters. The minimum acceptable buffer width is 35 feet. Wider buffer widths may be required by regulation.
25. **Wet weather event** – any climatological event resulting in precipitation, such as rain, snow, hail, or any other event that may or may not runoff the surface of the land.
26. **Winter** – for the purposes of this permit, winter is defined as December 15 through February 28; or anytime the ground is frozen at least four (4) inches; or anytime that the ground is snow covered.

B. Effluent Limitations

The requirements under this section constitute narrative effluent limits to protect water quality.

1. The permittee shall comply with the relevant provisions of 25 Pa. Code § 91.36, 40 CFR § 122, 25 Pa Code § 92a.12 which has incorporated by reference 40 CFR § 412 and 25 Pa. Code Chapter 83, Subpart D including:
 - a) For manure storage on CAFOs operating under this permit, the manure storage facilities must be designed, constructed, operated and maintained to collect all manure, litter, and agricultural wastewater from the production area unless other facilities have been designed and constructed to handle non-manure contaminated agricultural process wastewater. The manure storage facilities must be sized to ensure that there is adequate storage space between periods of application so that the permittee does not exceed application rates established in the current approved NMP developed under Chapter 83, Subchapter D and 40 CFR § 122.42(e)(i-ix) . The manure storage facility must be designed, constructed, operated, and maintained to ensure that the facility is structurally sound, watertight, and located and sized properly to prevent pollution to groundwater and the discharge of pollutants to surface water for any storm up to and including the design rainfall event. Any manure storage facility must be fitted with a depth marker. For operations that came into existence after April 13, 2003 and that include swine, poultry, or veal calves, the design rainfall event is the 100 year, 24 hour storm. For all other operations, except as required by 25 Pa Code § 91.36(a)(5), the design rainfall event for all manure storages facilities and other facilities is the 25-year, 24-hour storm.
 - b) CAFOs operating under this permit shall obtain and implement an approved NMP under 25 Pa. Code Chapter 83, Subchapter D (relating to nutrient management) and 40 CFR § 122.42(e)(1)(i-ix), according to Part C of this Permit including all BMPs identified in the plan, both for land application and for manure, litter, and agricultural process wastewater handling and storage, or otherwise as approved by the State Conservation Commission or conservation district with approval authority under 25 Pa. Code Chapter 83, Subchapter D. This would include BMPs for land application and for manure storage facilities and any other storage facilities used to contain non-manure contaminated agricultural process wastewater.
 - c) The permittee shall implement manure, litter and agricultural process wastewater application setbacks of at least 100 feet, or vegetated buffers at least 35 feet in width from surface waters and conduits to surface waters, open tile line intake structures, sinkholes, and agricultural wellheads or other conduits to surface water. Manure that is stockpiled for 15 consecutive days or longer shall be under cover or otherwise stored to prevent discharge to surface water.
2. The permittee shall comply with the requirements enumerated in 25 Pa. Code § 92a.29(e) of the

regulations.

3. The permittee shall ensure that activities and facilities, including the production and the land application areas under control of the owner and/or operator, associated with the CAFO operation do not create a danger of pollution, or cause or contribute to pollution of surface waters. In response to its own finding of water quality problems or based upon documented evidence, the Department may, upon written notice, require the permittee to develop and implement additional BMPs or use other control measures to promptly abate the pollution problem and to ensure that the water quality of the receiving water is protected and maintained and to ensure that clean water is diverted, as appropriate, from the production area.

C. Self-Monitoring, Reporting and Record Keeping

1. Self-Inspections

- a. Daily Inspections – Inspection of water lines including drinking water or cooling water lines shall be conducted and documented each day. The permittee shall create and maintain a daily log of inspections of water lines that documents any leaks and the corrective actions taken by the permittee. The permittee shall document the daily inspections on CAFO Self-Inspection Reports that shall be submitted to the Department within 15 days following the end of each calendar quarter.
- b. Weekly Inspections – Visual inspection of the production area shall be conducted and documented once every week, and after measurable wet weather events. Inspections of the production area shall, at a minimum, include:
 - i. An evaluation of the adequacy, stability, and operation of the manure storage facilities and/or impoundments, noting the level in liquid impoundments as indicated by the depth marker installed in accordance with Part C I.F of this permit.
 - ii. An inspection of any devices channeling contaminated stormwater to the wastewater and manure storage and containment structure.
 - iii. An assessment of storm water diversion devices and runoff diversion structures.
 - iv. A determination of the storage level in the manure storage and containment structure.
 - v. An examination of subsurface drainage and/or leak detection systems for the presence of manure and to ensure that these systems are functioning properly.

The weekly self-inspection results shall be recorded on CAFO Self-Inspection Reports that shall be submitted to the Department within 15 days following the end of each calendar quarter. The report shall identify any problems or shortcomings found and the steps taken to correct them. Deficiencies not corrected within 30 days must be accompanied by an explanation of the factors preventing immediate correction. Upon reviewing the reports, the Department may conduct its own follow-up compliance inspections to assure the adequacy of facilities and implemented BMPs and other control measures to protect water quality.

- c. Periodic inspections performed when land applying manure – During the weeks that manure, litter, or process wastewater is land applied under the NMP, the CAFO must inspect land application equipment for leaks and document the dates and results of these inspections and actions taken to abate the leakage on CAFO Self-Inspection Reports, which shall be submitted to the Department within 15 days following the end of each calendar quarter.
- d. Any CAFO that land applies manure, litter or agricultural process wastewater shall document the weather conditions at the time of application and for 24 hours prior to and following application, and the method used to apply the manure, litter, or agricultural process wastewater on CAFO Self-Inspection Reports, which shall be submitted to the Department within 15 days following the end of each calendar quarter.
- e. The permittee shall maintain records of mortality management and practices used by the CAFO to meet the requirements of Part C I.E., Animal Mortality, and the permittee's approved NMP. Records of mortality management shall be maintained on-site in accordance with Part A I.C.11 of this permit.
- f. Any permittee that exports manure in accordance with an approved NMP shall complete and

maintain current export records on a Department CAFO Manure Exportation form, which shall be submitted to the Department within 15 days following the end of each calendar quarter.

- g. The permittee shall maintain records documenting the current design of any manure or litter storage structures in accordance with Part C I.F., including volume for solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity. Records of current designs shall be maintained on-site in accordance with Part A I.C.11 of this permit.
 - h. The permittee shall maintain on-site a copy of their NMP including; calculations showing the total nitrogen and phosphorous to be applied to each field, including sources other than manure, litter, and agricultural process wastewater, and a complete copy of the information needed to submit an Annual Report in accordance with Part A I.C.7 of this permit. Records shall be maintained on-site in accordance with Part A.1.C.11 of this permit.
 - i. The permit shall maintain records of test methods used to sample and analyze manure, litter and agricultural process wastewater on-site in accordance with Part A.I.C.11.
 - j. Records required to be maintained in Part A I.C.1 may be maintained on forms provided by the Department or on other comparable forms.
2. Representative Sampling – Sampling is required if there is a cloudy, discolored, odiferous or unusual discharge from the perimeter and/or leak detection system of a manure storage facility. If samples and other measurements are taken for the purpose of complying with this permit, they shall be representative. If there is a discharge from a manure storage facility, the frequency and volume of discharge must be estimated, monitored and recorded, and the record must be kept on site. The samples must be analyzed for CBOD, ammonia-nitrogen, pH, total suspended solids and coliform bacteria. Samples shall consist of grab samples collected from the discharge from the manure storage facility. A minimum of one sample shall be collected from each discharge. The results shall be submitted to the Department as an attachment to a Non-Compliance Discharge Report, as discussed in paragraph 6 below.
 3. Recording of Results – When any measurement or sample is taken, the permittee shall record the following information:
 - a) The exact place, date, and time of sampling or measurements;
 - b) The person(s) who performed the sampling or measurements;
 - c) The date(s) the analysis was performed;
 - d) The person(s) who performed the analysis;
 - e) The analytical techniques or methods used; and
 - f) The results of such analysis.
 4. Test Procedures – If and when samples of discharges from the perimeter and/or leak detection system are collected, the analytical test procedures contained in 40 CFR Part 136, or alternate test procedures approved pursuant to that part, or approved in writing by the Department shall be used. The method for collecting samples shall be appropriate for the test methods utilized for the analysis. For routine manure and soil sampling see Part C of this permit.
 5. Anticipated Non-compliance – The permittee shall give advance notice to the Department of any planned changes in the permitted operation, including the NMP, which may result in non-compliance with permit requirements, including a report on steps taken or to be taken to eliminate or minimize the impacts on water quality.
 6. Non-Compliance Reporting – The permittee shall record and report to the appropriate Department Regional Office any manure storage facility discharges or structural/functional deficiencies identified in the Self Inspection Report attached to this permit, and any non-compliance with the terms and conditions of this permit that may endanger public health or safety or the environment or any wet weather event that

caused any discharge or overflows. This information shall be provided as soon as possible, but not later than 4 hours after the time the permittee becomes aware of the incident causing or threatening pollution. A completed CAFO Non-Compliance Discharge Report form shall be submitted to the Department within 5 days of becoming aware of the incident. Where necessary, the Non-Compliance Discharge Report shall be supplemented with a description of the non-compliance and its cause; the period of noncompliance, including exact dates and times; if not already corrected, the anticipated time the non-compliance is expected to continue; discharge sampling results; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance. If reasonably possible, the above shall also include permittee notification of known downstream users of incidents causing or threatening pollution pursuant to 25 Pa. Code Chapter 91.33.

7. Annual Report – An annual report shall contain all information required by 40 CFR § 122.42(e)(4). The annual report shall cover the reporting period of January 1st to December 31st and shall be received by the Department on or before February 15th. The January 1st to December 31st reporting period applies to manure applications and crop planting dates even if the crop is harvested after December 31st. The submitted report shall include all information identified on the “Annual Report Form” attached to this permit, and include the following information, at a minimum:
 - a. The number and type of animals, whether in open confinement or housed under roof;
 - b. The estimated amount of total manure, litter and process wastewater generated by the CAFO during the year (tons/gallons);
 - c. The estimated amount of total manure, litter and agricultural process wastewater transferred to other person by the CAFO during the year (tons/gallons);
 - d. Total number of acres for land application covered by the CAFO's NMP;
 - e. Total number of acres under control of the CAFO that were used for land application of manure, litter and process wastewater during the year;
 - f. Summary of all manure, litter and process wastewater discharges from the production area that have occurred during the year, including date, time, and approximate volume; and
 - g. A statement indicating whether the current version of the CAFO's nutrient management plan was developed or approved by a certified nutrient management planner; and
 - h. The actual crop(s) planted (from January 1st through December 30th) and associated “actual yield(s)” for each field (even if harvest extends beyond December 30th), and the actual nitrogen and phosphorus content of the manure, litter, and process wastewater applied to each field during the year.
8. Other Reporting – All approvals of new or revised NMPs or E&S (Soil Conservation) Plans shall be submitted to the Department within 30 days of approval, along with a copy of the new or amended plan.
9. Other Non-compliance – The permittee shall record and maintain self-inspection reports for all instances of non-compliance with this permit that are not specifically required to be recorded elsewhere. Compliance with the above reporting requirement shall not excuse the permittee from notification of incidents causing or threatening pollution pursuant to 25 Pa. Code § 91.33(a).
10. Signatory and Certification Requirements – The completed forms and reports that must be submitted to the Department shall be signed and certified either by the following applicable person (as defined in 40 CFR §122.22(a)) or by that person's duly authorized representative (as defined in 40 CFR § 122.22(b)):
 - for a corporation - by a responsible corporate officer.
 - for a Partnership or Sole Proprietorship - by a general partner or the proprietor, respectively.
 - for a Municipality, State, Federal or other public agency - by a principal executive officer or ranking elected official.

If signed by other than the above, written notification of delegation of signatory authority must be

submitted to the Department.

11. Copies of all records of self-inspections, annual reports, and other monitoring inspections required by this permit shall be retained for a period of at least five (5) years and shall be made available to the Department, the EPA Regional Administrator, or his or her designee for review upon request.

PART B

I. MANAGEMENT REQUIREMENTS

A. Permit Renewal, Modification, Suspension, Termination, or Revocation and Reissuance

1. This permit may be renewed, modified, suspended, terminated, or revoked and reissued during its term for any of the causes specified in 25 Pa. Code Ch. 92a.
2. Filing of a request by the permittee for any of the actions in paragraph I.A.1, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
3. In the absence of a Departmental action as described in paragraph I.A.1, the permittee shall comply with any applicable effluent limitations and other requirements within the time specified in 25 Pa Code § 92a.51.
4. Permit renewal, modification, suspension, termination, or revocation and reissuance will be conducted according to 25 Pa. Code Chapter 92a.
5. In the event that the permittee proposes to modify the operation in a manner that requires an amendment to the NMP under 25 Pa. Code Ch.83 and 40 CFR § 122.42, the permittee shall notify the Department and, if required, submit a new application to amend coverage under the Permit prior to implementing the modifications to the facilities. The Department may approve or deny the application as provided by 25 Pa. Code Ch. 92a. If the Department denies the application, then the permittee shall apply for and obtain an individual permit pursuant to the instructions by the Department in the denial letter. Refer to Additional Provisions No. 4 of this permit if the proposed modification includes an increase in AEU's that exceeds ten percent (10%) of the number of AEU's listed in the NMP.

B. Duty to Provide Information

1. The permittee shall furnish to the Department within a reasonable time any information that the Department may request to determine whether cause exists for modifying, renewing, suspending, terminating, or revoking and reissuing coverage approved under this Permit, or to determine compliance with this Permit.
2. Upon request, the permittee shall furnish to the Department, the EPA Regional Administrator, or his or her designee, copies of records required by Part A I.C. of this Permit.
3. Where the permittee becomes aware that relevant facts were not submitted in an application, or incorrect information was submitted in an application or in any subsequent report to the Department, the permittee shall promptly submit such facts or information to the Department.
4. The permittee shall give advance notice to the Department of any planned physical alterations or additions to the operation that could in any way affect the impact on surface waters by the CAFO.
5. Changes to the NMP that are likely to increase the risk of nitrogen and phosphorous transport to surface waters are classified as substantial changes which require an amendment of the NMP with full public notice and comment pursuant to Parts B I.A.5 and C I.A of this permit.

C. Facilities Operation

The permittee shall at all times maintain in good working order and properly operate and maintain all facilities and systems which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, regular inspection and maintenance programs, and the provision of adequate controls and quality assurance procedures.

II. PENALTIES AND LIABILITY

A. Penalties for Violations of Permit Conditions

Any person who violates any provision of this permit, any rule, regulation, or order of the Department, or any condition or limitation of any permit issued pursuant to the State Act is subject to criminal and civil penalties, or both, as set forth in Sections 602, 603 and 605 of the State Act.

Any person violating Sections 301, 302, 306, 307, 308, 318, or 405 of the State Act, including this permit, or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the State Act is subject to civil, administrative, and/or criminal penalties as set forth in 40 CFR § 122.41(a)(2).

B. Falsifying Information

Any person who (1) falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit; or (2) knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance) is subject to a fine and/or imprisonment as set forth in 18 P.S. § 4904, 40 CFR § 122.41(j)(5) and (k)(2) and 40 CFR Part 19.

C. Liability

1. Nothing in this Permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to the State Act or the Federal Act.
2. Nothing in this Permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under the State Act or the Federal Act.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of the State Act, and 25 Pa. Code Chapter 92a, the permittee shall allow the Department, the EPA Regional Administrator, and/or their authorized representatives, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility, activity or operation is located or conducted, or where records must be kept under the conditions of this permit. The Department or their authorized agents shall not exercise this right so as to compromise the health, safety, and welfare of people or the environment and shall adhere to industry standards for biosecurity and the PA Biosecurity Act. In the event of a contagious disease outbreak, the actions of the Department or their authorized agents will be consistent with 25 Pa. Code Chapter 83, Subchapter D (Nutrient Management Regulations);
2. To have access to and copy at reasonable times any records that must be kept in accordance with the conditions of this permit;
3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit;
4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the State Act or the Federal Act, any substances or parameters at any location.

B. Transfer of Permits

1. Transfers by modification - Except as provided in paragraph (2) of this section, the Permit may be transferred by the permittee to a new owner or operator only if the Permit has been modified or revoked and reissued by the Department to identify the new permittee and incorporate such other requirements as may be necessary under 25 Pa. Code Chapter 92a or the Federal Act.
2. Automatic transfers - As an alternative to transfers under paragraph (1) of this section, any Permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer date in accordance with paragraph (2)(b) of this section;
 - b. The notice includes the appropriate Department transfer form signed by the existing and proposed new permittees, containing an effective date for transfer of permit responsibility and terms of transfer and liability between them; and
 - c. The Department does not notify the existing permittee and the proposed new permittee of its denial of the transfer within 30 days of receipt of written notification from the current permittee. If this notice from the Department is not received, the transfer is effective on the date specified in the transfer form mentioned in paragraph (2)(b) of this section.
3. In the event the Department does not approve a transfer of the Permit, the new owner or operator must submit an application, or new permit application as specified by the Department.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort or any exclusive privilege.

D. Other Laws

1. The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.
2. Nothing in this permit relieves the permittee, owner or operator from the obligation to comply with all applicable federal, state, or local laws and regulations

E. Notification of Intent to Cease Operation

1. Notice of Termination (NOT) - When the operations permitted under this permit will cease or be eliminated, the permittee shall submit a letter and an NOT of the operation signed in accordance with the signatory requirements contained in this permit not less than 30 days before the cessation of operations.

The NOT shall include the following information:

- a. Name, mailing address, and location of the operation for which the notification is submitted. Where a mailing address for the site is not applicable, the location shall be described in terms of the latitude and longitude to the nearest 15 seconds.
- b. The permittee's name, address, telephone number and ownership status.
- c. The CAFO NPDES permit number and issue date;
- d. The effective date of and reason for stopping the operations;
- e. The following certification duly signed in accordance with the signatory requirements:

"I certify under penalty of law that the above CAFO has ceased operation or will cease operation on the date shown at the location specified in this application. I understand that by submitting this notice of termination I am no longer authorized to operate a CAFO at this location. I also understand that operating CAFOs without a Department permit in the Commonwealth is unlawful under the Clean Water Act and Clean Streams Law".

2. Where to submit NOTs: All Notices of Termination are to be sent to the Department's Regional Office that issued the original CAFO Permit.

F. Facility Closure Plan Requirements

All NOTs must be accompanied with a facility/operation closure plan that shall include the following components:

1. Where not otherwise required by the Nutrient Management Plan, a plan for the removal and disposing of all animal waste, processing waste, and bedding material in an environmentally safe manner. The manure and manure-contaminated biodegradable material, including soils, may be land applied in accordance with the Manure Management for Environmental Protection Manual or the facility's Nutrient Management Plan.
2. An estimate of the date or season and year in which final facility closure will occur.
3. Erosion and sedimentation control with a schedule of steps.
4. Re-grading, re-vegetation, and stabilization of the affected area.
5. For existing earthen lined facilities with groundwater monitoring wells in place, an operation plan for post closure monitoring for a one (1) year period to assure protection of groundwater resources. A written report of monitoring results shall be submitted to the Department at the end of that period. A final close out inspection of the leak detection system following removal of the manure storage facility must be completed within 30-days of the expected termination date for the operation. A written report of the close out inspection shall be submitted to the Department 30 days after the final close out of the facility.\
6. The name, address, and telephone number at which the permittee and or person in charge of the closure operation can be reached.

PART C

I. SPECIAL PERMIT REQUIREMENTS

In addition to the other requirements of this Permit, the permittee shall maintain compliance with the following CAFO-specific requirements.

A. Nutrient Management Plans (NMPs) and Manure Management

1. The permittee shall implement a Nutrient Management Plan (NMP) including all BMPs in the plan approved under 25 Pa. Code Chapter 83, Subchapter D, as amended and 40 CFR § 122.42(e)(1)(i-ix), including phosphorus-based planning under revisions to 25 Pa. Code § 83.293 and effective October 1, 2006. The NMP requirements under 25 Pa. Code Chapter 83 are consistent with the linear approach for nutrient applications set forth in 40 CFR § 122.42(e)(5)(i). All proposed changes to the NMP shall be subject to the requirements in 40 CFR § 122.42(e)(6) and in B I.A.5. of this permit
2. The permittee shall submit all approvals of new or amended NMPs to the Department within 30 days of approval along with a copy of the new or amended NMP. The permittee shall ensure they maintain an approved NMP for the current crop year that runs from October 1 through September 30 of each year.
3. The NMP shall be reviewed annually to ensure manure applications are consistent with 25 Pa. Code § 83.293. Copies of annual NMP reviews must be kept on-site for a minimum of five (5) years and be made available for review during Department inspections.
4. In addition to Part C I.A.1, The permittee shall submit a copy of all NMP revisions to the approved NMP to the Department within 30 days of the revision. Such revised (updated) plans must be kept on-site and implemented in accordance with 25 Pa. Code Chapter 83, Subchapter D. and 40 CFR § 122.42(e)(1)(i-ix) requirements.
5. Manure may not be mechanically applied:
 - 1) Within 100 feet of the top of the bank of a perennial or intermittent stream with a defined bed and bank, a lake or a pond, unless a permanent vegetated buffer of at least 35 feet in width is used to prevent manure runoff into the stream, lake or pond,
 - 2) Within 100 feet of an existing open sinkhole unless a permanent vegetated buffer of at least 35 feet in width is used,
 - 3) Within 100 feet of active private drinking water sources such as wells and springs,
 - 4) Within 100 feet of an active public drinking water source, unless other State or Federal laws or regulations require a greater isolation distance, and
 - 5) On crop management units having less than 25% plant cover or crop residue at the time of manure application, unless:
 - (a) For fall applications, the crop management unit is planted to a cover crop in time to allow for appropriate growth to control runoff until the next growing season, or the manure is injected or mechanically incorporated within 5 days using minimal soil disturbance techniques consistent with no-till farming practices. The Pennsylvania Technical Guide contains practices which may be used to satisfy the fall applications requirement. Other practices shall be approved by the SCC. The practices must be consistent with those in the agricultural erosion and sediment control plan.
 - b) For applications in the spring or summer, the crop management unit is planted to a crop that growing season.
6. Winter Spreading – The permittee shall not spread manure during the winter as defined in 25 Pa. Code § 83.201, except as authorized in the permittee's Nutrient Management Plan, or unless the permittee has fully complied with 25 Pa. Code § 83.372, and has obtained a plan amendment due to unforeseen circumstances. The definition of winter is included in Part A I.A.26.

The permittee shall notify DEP in writing within 7 days prior to land application of manure during the winter period. The permittee shall certify in the notification that:

- a. Consistent with the approved NMP, actions have been taken to maximize the available capacity in the manure storage facility prior to the winter period to prevent pollution of ground and surface water,
- b. The storage has been properly operated and maintained, and
- c. Manure spread during the winter shall be applied in an amount and a manner consistent with the approved NMP.

The permittee may use the Department of Environmental Protection, Winter Period Application of Manure Notification form to provide the notification.

7. There shall be no winter application,
 - 1) Within 100 feet of an above ground agricultural drain inlet where surface flow is toward the inlet,
 - 2) Within 100 feet of a wetland on the National Wetland Inventory maps which is within the 100 year floodplain of an EV stream segment if surface flow is toward the wetland and
 - 3) Unless the fields have 25% cover or an established cover crop – see 25 Pa. Code § 83.294. Additionally, the setbacks in Part C I.A.5 also shall be implemented.
8. Manure generated and exported by the CAFO shall be hauled, and transported in compliance with requirements of the Commercial Manure Hauler and Broker Certification Act and regulations promulgated hereunder, as applicable.
9. The permittee shall provide a copy of the most recent manure and agricultural wastewater sampling results to the person receiving the manure and agricultural wastewater or his representative.
10. Manure Stockpiling: Manure that is stockpiled for 15 consecutive days or longer shall be under cover or otherwise stored to prevent discharge to surface water.
11. Manure tests are required annually for each manure type generated on the operation in compliance with 25 Pa. Code § 83.291.
12. Soil tests are required for each crop management unit at least every three years from the date of the last test in conformance with 25 Pa. Code § 83.292.

B. Preparedness, Prevention and Contingency Plan (PPC Plan)

In addition to the Contingency Plan for manure spills required as part of the NMP, the permittee shall develop, implement and, when needed, update the Preparedness, Prevention, and Contingency (PPC) Plan submitted with the application for this CAFO. The PPC Plan must be kept at the site at all times. The Department may, upon written notice, require revisions and corrections to the PPC Plan if it determines the plan to be inadequate.

Chemicals and other contaminants handled on-site must not be disposed of in any manure, litter, agricultural process wastewater, or stormwater storage or treatment system, unless it is specifically designed to treat such chemicals and contaminants.

C. Erosion and Sediment Control Plans (E&S Plans)

1. The permittee shall implement and, when needed, update the E&S Plan for plowing or tilling activities and Animal Heavy Use Area operations on all land owned or leased by the permittee in accordance with 25 Pa. Code Ch. 102.
2. All E&S Plans for plowing or tilling activities or Animal Heavy Use Areas must be revised to identify and address Animal Heavy Use Areas and all other plan requirements as specified in 25 Pa. Code §102.4(a) (4) through (7) in order to minimize accelerated erosion and sedimentation. The revised plans must provide appropriate BMPs including a schedule for implementation in accordance with

25 Pa. Code § 102.4(a).

3. When applicable, the permittee must develop and implement an E&S Plan meeting the requirements of 25 Pa. Code § 102.4(b) for earth disturbance activities other than agricultural plowing or tilling or animal heavy use areas; and must have the E&S Plan available on-site at all times during construction of facilities, such as buildings or manure storage facilities.

D. NPDES Permit for Stormwater Discharges during Construction Activities

The permittee shall obtain a separate NPDES permit for stormwater discharges associated with construction activity meeting the requirements of Chapter 102 (relating to erosion and sediment control) when applicable and 25 Pa. Code Ch. 92a (relating to NPDES permits).

E. Animal Mortality

The permittee shall comply with 3 Pa. C.S.A. § 2351 et seq. (relating to the Domestic Animal Law) and 25 Pa Code § 243.11 when handling and disposing of dead animals. The carcass of a dead animal not killed for food shall be removed and disposed of by burial or incineration or some other sanitary method, such as rendering and composting where applicable, within 24 hours after death. If the carcass is buried it shall be placed so that every part shall be covered by at least 2 feet of earth and at a location not less than 100 feet from waters of this Commonwealth, and located out of the 100-yr flood plain. In all cases of death from communicable disease the carcass shall be thoroughly enveloped in unslaked lime. If composted, the compost shall be accounted for in the NMP. Mortalities shall not be disposed of in any liquid manure or process wastewater system.

F. Manure Storage Structures and Water Quality Management Permit Requirements

1. The permittee shall keep engineering certifications on-site for any liquid or semi-solid manure storage facilities at the operation. The permittee shall also maintain the current design of the manure or litter storage structures on site, as required by 40 CFR § 412.47 and 412.37(b)(5). Further, for facilities that require a Water Quality Management permit under 25 Pa. Code § 91.36(a), the permittee shall obtain the permit and follow its conditions and requirements. This includes operation and maintenance requirements.
- 2a. The permittee shall maintain a minimum 12-inch freeboard for manure storage facilities that are ponds, and a minimum 6-inch freeboard for all other manure storage facilities. For an agricultural operation with over 1,000 AEU's that was a new or expanded operation after January 29, 2000, a minimum 24-inch freeboard shall be maintained for manure storage facilities that are exposed to rainfall.
- 2b. The permittee shall install and maintain permanent markers or gauges within the structure to determine freeboard. All open surface liquid impoundments must have a depth marker which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event. In the case of new sources subject to effluent limitations established pursuant to 40 CFR § 412.46(a)(1) of this part, all open surface manure storage structures associated with such sources must include a depth marker which clearly indicates the minimum capacity to contain the maximum runoff and direct precipitation associated with the design storm use in sizing the impoundment for no discharge.
3. The permittee shall maintain vegetative growth on the embankments of the earthen manure storage facility at a height no greater than 12 inches to allow for inspection of the embankments. Additionally, the permittee shall prevent the growth of dense or woody vegetation with roots that may affect the structural integrity of the impoundment or the impoundment liner. Animal burrows should be excavated, backfilled with suitable material in well compacted four-inch lifts and reseeded.
4. The NMP must contain a determination of adequate manure storage capacity, accounting for the required freeboard, precipitation from the design storm, and residual solids after liquids have been removed. Sufficient capacity shall be provided at the start of winter to implement the NMP.
5. The permittee may not land apply manure during the winter months unless expressly authorized to do so in the NMP. Sufficient capacity shall be provided at the start of winter to implement the NMP. By

January 15th each permittee with a manure storage facility must provide the Department with notification, in writing, of the available manure storage capacity observed on or about December 15th and the amount of manure that is expected to be generated over the winter. For operations with a liquid or semi-solids storage, the available capacity in inches and feet should be reported. For operations with a solids only storage, the estimated volume of available storage should be reported. The manure storage capacity does not include the freeboard portion of the manure storage facility.

6. If the manure storage does not have sufficient capacity to hold all manure generated over the winter and the NMP does not authorize winter application, the permittee must submit and receive approval for a NMP amendment that describes how the permittee will manage the manure and the manure storage facility to insure that the minimum required freeboard requirement is not violated.
7. The Permittee shall, on at least a weekly basis, inspect all manure storages and record the results of the inspection on the CAFO Self-Inspection Report forms provided with this permit. This storage shall be inspected for visible cracking, rodent holes, tree and shrub growth on the berms or other problems with the manure storages that would lead to leakage. Visible slope failure, visible tears of any liner, or knowledge of any local water pollution issues associated with the storage facility shall be recorded.
8. The permittee shall maintain and keep applicable engineering certifications on-site for any liquid or semi-solid manure storage facilities at the operation. The permittee shall also maintain the current design of the manure or litter storage structures on site, as required by 40 CFR § 412.47 and 412.37(b)(5).

G. Storage of Feed and other Raw Materials

The permittee shall implement measures and/or BMPs to prevent discharge to surface water from raw material storage areas, including feed storages. Chemicals and other contaminants handled on-site must not be disposed of in any manure, litter, agricultural process water or treatment system unless specifically designed to treat such chemicals and contaminants.

H. Best Management Practices (BMPs)

BMPs for CAFOs are identified in the operation's Nutrient Management Plan and the Erosion and Sediment Control Plan for plowing or tilling activities or for Animal Heavy Use Area operations. At a minimum, the permittee shall implement these BMPs.

The Department may require additional BMPs and controls to protect public health and to protect, maintain and restore water quality and the existing and designated uses of waters of the Commonwealth. For facilities within the Chesapeake Bay watershed, this may include additional BMPs listed in Pennsylvania's Watershed Implementation Plan for Chesapeake Bay. These BMPs may include, but are not limited to, Conservation Tillage, Continuous No-Till, Commodity Cover or Cover Crop, Pasture Management, Dairy Precision Feeding and use of Phytase.