



COMMONWEALTH OF PENNSYLVANIA
ENVIRONMENTAL HEARING BOARD



MARJORIE HUDSON, LORNE SWOPE,	:	
DAVID LIPPERT, AND DELORES STEINER	:	
	:	
v.	:	EHB Docket No. 2015-096-L
	:	
COMMONWEALTH OF PENNSYLVANIA,	:	
DEPARTMENT OF ENVIRONMENTAL	:	
PROTECTION and CFC FULTON	:	Issued: September 1, 2015
PROPERTIES, LLC, Permittee	:	

**OPINION IN SUPPORT OF ORDER GRANTING
PETITION FOR SUPERSEDEAS**

By Bernard A. Labuskes, Jr., Judge

Synopsis

The Board issues an Opinion in support of a previous Order granting a petition for supersedeas of the Department’s coverage approval of a stormwater permit for a CAFO. The petitioners have made a strong showing of likelihood of success on the merits of their claim that the Department did not comply with applicable regulatory requirements when it approved coverage under the general permit. The Department approved coverage even though the applicant failed to conduct appropriate infiltration and geotechnical studies to demonstrate that its system would meet regulatory criteria and be protective of the environment. The Department’s unlawful conduct constitutes irreparable harm *per se*.

OPINION

Marjorie Hudson, Lorne Swope, David Lippert, and Delores Steiner filed this appeal from the Department of Environmental Protection’s (the “Department’s”) July 2, 2015 authorization of CFC Fulton Properties, LLC’s (“CFC’s”) notice of intent for coverage under the

NPDES permit for Stormwater Discharges Associated with Construction Activities for CFC's Concentrated Animal Feeding Operation (CAFO) known as the Bivouac Swine Farm in Ayr Township, Fulton County. The Appellants are neighbors of the proposed facility. CFC is a corporation that, along with its sister companies within the umbrella of the Clemens Family Corporation, is engaged in the development and operation of facilities for the production of pork products. CFC has developed and is operating numerous farm facilities throughout the northeast part of the country. Hatfield Quality Meats is one of its brands. CFC is the company within Clemens that is developing the sow farm that is the subject of this appeal.¹ The fact that CFC is developing a sow farm as opposed to, say, a data processing center or some other project that would result in increased impervious surfaces at the site is largely irrelevant for purposes of analyzing the technical merits of the facility's stormwater management plan.

CFC obtained several permits and approvals from the Department to build its facility and the Appellants or others have appealed most of them. Along with the stormwater authorization that is the subject of this appeal, the Appellants appealed CFC's sewage facilities planning approval. (EHB Docket No. 2015-015-L.) They have since withdrawn that appeal. CFC's odor management plan, which was approved on February 4, 2014, was not appealed. We are presiding over three other active appeals related to this project: EHB Docket Nos. 2014-037-L (nutrient management plan), 2015-115-L (water quality management permit), and 2015-116-L (PAG-12 CAFO permit).

The development site is approximately 224 acres. Existing land cover is a mixture of row crops, meadow, forest, and pasture. The site basically consists of a hill. The front (or east) side

¹ The Appellants allege that "Country View Family Farms" will be the operator of the facility and the Department erred in not including that entity as a co-permittee on the coverage authorization, citing 25 Pa. Code § 102.5(h). This issue was not developed further during the supersedeas proceedings and we are not in a position to address it further at this time.

of the hill slopes from Great Cove Road up to a ridgeline. The site then drops down on the back side of the ridge. The back portion of the site looks like a saddle or bowl. Most of the bowl cannot be seen from the road. Other than a new driveway that will crest the front of the site and the stormwater controls associated with the driveway, all of CFC's development will occur in the bowl area.

The bowl drains to two unnamed tributaries (UNTs) of Big Cove Creek. The streams are classified as cold water fisheries and migratory fisheries. We are told that Big Cove Creek is a popular trout fishing stream. The two UNTs drain the bowl at its north and south ends, flow east and out through low points on the ridgeline, and then down to Big Cove Creek. At least two of the Appellants live next to the UNTs.

The proposed limit of disturbance is 36 acres, which includes 12.3 acres of new impervious area. CFC intends to construct a 71' x 486' gilt barn with a below grade manure tank, a 161' x 767' gestation barn, a 129' x 621' farrowing barn, and associated support facilities such as grain bins and a composting building. In order to build its facility, CFC will need to create a level pad where the back bowl is now located. This will involve excavating up to 35 feet near the top of the ridge and filling other areas with up to 40 feet of fill. The pad will be bounded by steep slopes. The parties disagree whether CFC will be able to control excessive erosion on those slopes. For current purposes the Appellants have not convinced us that there are any critical deficiencies with respect to how stormwater is to be managed during and after construction specific to the pad or its slopes.

Post construction stormwater management on the front (east) side of the site, which appears to be largely associated with driveway construction, consists primarily of a rain garden and three detention basins. A detention basin is designed to control the rate of stormwater

discharges. It is not reliant on infiltration. A rain garden is an infiltration Best Management Practice (BMP). For current purposes the Appellants have not shown us that there are any critical deficiencies with respect to stormwater management measures specific to the east side of the property.

Stormwater on the back (west) side of the site where most of the development will occur will be routed to three basins that have been labeled bioretention basins. CFC's original plan called for two basins (BB-1 and BB-2), but a third basin was added and labeled Bioretention Basin 1-A (BB-1A). The basin is labeled 1A because it is designed to discharge to Bioretention Basin 1 (BB-1). CFC's Post Construction Stormwater Management Plan is somewhat confusing with respect to Basins 1 and 1A, at times referring to both basins as BB-1. Stormwater control on the back side of the site is the primary bone of contention between the parties and it is where we have focused most of our attention.

CFC has not told us how it intends to build BB-1A. The upper layer of soils in the area of the basins is clay. It is not effective at infiltration, so in order to build BMPs that are designed to infiltrate, CFC needs to remove the clay layer. In order to construct Bioretention Basin 2 (BB-2), CFC intends to excavate and remove all of the existing soils down to bedrock, which is approximately 14.5 feet below the surface. It will then refill the excavation "with shale soils from on hillside of site that are stockpiled for this later use." (Plan, Drawing C8.) Those soils will be "consolidated" (Drawing C8) or "compacted" (Plan at 4) to 85-percent minimum density, installed in 8-inch lifts, and tracked in with a track loader until the pit is refilled to just below 2 feet from the bottom of the final basin. The last 2 feet will be filled in with a soil mixture of 30-percent sand, 40-percent compost, and 30-percent top soil. That final layer will not be

compacted. The final basin, of course, will continue to be encased in the impermeable clay layer.

CFC has proposed to test the backfill for infiltration every two feet with a double ring infiltrometer “to assure backfill will meet the required minimum infiltration rate of 2”/hr.”

(Drawing C8.) The plan sheet continues:

An infiltration test will need to be performed for every 10,000 SF of basin area. If during testing the range exceeds 10”/HR, begin consolidating amendments with roller to reduce voids. If during testing and placement of the soil amendments and the infiltration rate is less than 2”/HR, chisel plow the amendment material to 18” depth and retest.

(Drawing C8.)

BB-1 will be constructed by first removing the top layer of poorly-infiltrating clay, which CFC believes will end 42 inches below the surface. This is based on a narrative description of the test pit that was dug where BB-1 will be located. (Surprisingly, no logs from the test pits are included in the plan.) CFC believes it will then hit “medium to dark brown sandy loam” that might be a viable infiltration material. Whether it will be is not known because CFC did not test it. If it can be used, CFC will fill on top of it to replace the removed clay layer using the process used for BB-2 involving 8-inch lifts, etc. If the “sandy loam” cannot be used, BB-1 will be constructed like BB-2, beginning with an excavation down to bedrock at 9 feet below surface.

BB-1A “will control the discharge from the piping system and will infiltrate 15” of water before overflowing into the lower bio-retention basin with the primary outlet structure.” (Plan at 14-15.) The primary outlets in BB-1 and BB-2 will start discharging once 15 inches of water ponds in the basins. The basins also have emergency spillways near the top of the berms. It is not clear to us how the discharged water will flow once it exits the basins, although it is clear that

discharges from BB-1 will make it to the southern tributary and discharges from BB-2 will make it to the northern tributary. BB-1 will drain 8.57 acres and BB-2 will drain 8.55 acres.

The Basins were designed and sized with the goal of dewatering a 100-year storm event within 72 hours and meeting the volume, water quality, and rate control requirements of the Pennsylvania Code and Fulton County's Act 167 stormwater management watershed plan. However, and this is a key point, the design was based on an *assumed* infiltration rate of 2 inches per hour. There is no data whatsoever to support this assumption. CFC itself admits that 2 inches per hour is simply an assumption. (Plan at 15.)

In connection with its description of how it will attempt to satisfy the 2-inch per hour rate after the basins are excavated during the backfill process, CFC includes the following statement in its plan: "We will also be utilizing a safety factor of 2 when calculating the final results." (Plan at 15.) We do not know what this means. No safety factor appears on the plan sheets. CFC's expert engineer opined that a 4-inch per hour infiltration rate will need to be met during testing, but we are not sure that is required or if that is what was approved. It might also mean that the basins were sized to meet regulatory criteria even if they only infiltrate one inch per hour. The Department did not say how it interpreted the safety factor in approving the plans. In any event, a "safety factor of 2" based on a purely hypothetical value is itself aspirational. It is not a data-based prediction.

CFC's coverage approval was initially approved by the Fulton County Conservation District pursuant to authority delegated by the Department. In the fall of 2014, the Appellants filed objections to CFC's coverage approval and requested an informal hearing before the Department pursuant to 25 Pa. Code § 102.32(c). After the informal hearing, the Department identified technical deficiencies in the initial plan. The Department's October 21, 2014 technical

deficiency letter was critical of virtually every aspect of the plan. (App. Ex. 15.) The letter said that the plan failed to satisfy almost every applicable regulatory requirement. Over the course of seven pages the Department listed 47 specific deficiencies, some with subparts. Thereafter, CFC submitted additional documentation and plans to the Department in December 2014 and April 2015. The Department issued the PAG-02 authorization on July 2, 2015.

The Appellants complain that the plan that the Department approved on July 2, 2015 is not much different from the plan that the Department was highly critical of in October 2014. It is not clear at this point whether that is true or not. It does not appear that there was any additional site-specific testing to support the application after the technical deficiency letter. Although Department witnesses were asked how or why CFC's follow-up submissions convinced it to change its mind, we did not receive a satisfying or detailed explanation.

CFC would like to start construction immediately and has taken some preliminary steps in that direction. The Appellants have asked us to supersede CFC's coverage authorization, thereby ceasing construction until they have an opportunity to present their case at a hearing on the merits. We held a four-day hearing on the petition for supersedeas on August 14-19, 2015. We conducted a site view on August 20. The parties asked us to rule on the petition without waiting for transcripts from the hearing or post-hearing briefing. We agreed to comply with that approach, but it must be understood that nothing that we say herein in support of our ruling should be considered as a final finding of fact or conclusion of law on the merits of the appeal. On August 27, we granted the petition. This Opinion is issued in support of that Order.

Supersedeas Standard

The Environmental Hearing Board Act of 1988, 35 P.S. §§ 7511 – 7514, and the Board's rules provide that the grant or denial of a supersedeas will be guided by relevant judicial

precedent and the Board's own precedent. 35 P.S. § 7514(d)(1); 25 Pa. Code § 1021.63(a). Among the factors to be considered are (1) irreparable harm to the petitioner, (2) the likelihood of the petitioner prevailing on the merits, and (3) the likelihood of injury to the public or other parties. 35 P.S. § 7514(d); 25 Pa. Code § 1021.63(a); *Neubert v. DEP*, 2005 EHB 598, 601. In order for the Board to grant a supersedeas, a petitioner generally must make a credible showing on each of the three regulatory criteria, with a strong showing of likelihood of success on the merits. *Mountain Watershed Ass'n v. DEP*, 2011 EHB 689, 690-91 (citing *Pa. Mining Corp. v. DEP*, 1996 EHB 808, 810); *Neubert v. DEP*, 2005 EHB at 601; *Lower Providence Twp. v. DER*, 1986 EHB 395, 397. The Environmental Hearing Board Act also provides a distinct limitation that "[a] supersedeas shall not be issued in cases where pollution or injury to the public health, safety or welfare exists or is threatened during the period when the supersedeas would be in effect." 35 P.S. § 7514(d)(2); 25 Pa. Code § 1021.63(b) (Board rule providing same). In circumstances where there will not be pollution or injury to the public, the issuance of a supersedeas is ultimately committed to the Board's discretion based upon a balancing of all of the statutory criteria. *UMCO Energy, Inc. v. DEP*, 2004 EHB 797, 802; *Svonavec, Inc. v. DEP*, 1998 EHB 417, 420; *see also Pa. PUC v. Process Gas Consumers Grp.*, 467 A.2d 805, 808-09 (Pa. 1983). It is important to keep in mind that our ruling on a supersedeas petition is merely a prediction, based on a limited record and under rushed circumstances, of who is likely to prevail at the eventual hearing on the merits. *Tinicum Twp. v. DEP*, 2008 EHB 123, 127; *Global Ecological Servs., Inc. v. DEP*, 1999 EHB 649, 651. This is particularly true where, as here, at the parties' request we are working without a transcript of the supersedeas hearing.

Likelihood of Success on the Merits

Data-Based Decisionmaking

CFC's Stormwater Management Plan *must* be based on a "[p]redevelopment site characterization and assessment of soil and geology including appropriate infiltration and geotechnical studies that identify location and depths of test sites and methods used." 25 Pa. Code § 102.8(g)(1). The studies must be conducted "predevelopment." In order for studies to be "appropriate" in our view they need to produce meaningful data that provide a sound scientific basis for making an informed decision whether the proposed stormwater system will perform properly. The testing and the decisions based thereon should reflect generally accepted good engineering practice. Following collection, the data must *demonstrate* that the BMPs to be used to manage stormwater will be designed in such a way that they will meet regulatory criteria or at least be protective of the environment. 25 Pa. Code §§ 102.6, 102.8(b), (f), (g)(2), (g)(3), and 102.11(a) and (b). A permit applicant clearly has the right to propose novel or alternative approaches, but there still must be a demonstration that the alternative approach will be protective of the environment. 25 Pa. Code §§ 102.8 and 102.11.

The Appellants have a high likelihood of success of proving that the Department failed to comply with these regulations when it approved CFC's plan. The plan is not based on predevelopment, appropriate infiltration and geotechnical studies that provide enough information to make a scientifically sound, data-based demonstration that the BMPs will meet regulatory criteria and otherwise be protective of the environment.

There are literally no appropriate data in this case to support CFC's plan. CFC did no testing at the location of BB-1A. It did not test the shale soils from the hillside of the site that are

stockpiled for later use in backfilling the pits.² The Appellants claim in their petition that these “shale soils” are “highly impervious,” while CFC claims the mystery soils “have a high infiltration rate.” Neither statement has *any* empirical support. Also, it was not clear from the testimony where the “shale soils” would come from or how they would be handled. The Department witnesses said they have “no problem with the use of shale soils,” which is somewhat disconcerting because the Appellants’ expert credibly opined that the term “shale soils” can cover a wide range of materials with vastly different infiltration properties and is too vague to support any conclusion.

CFC did test soil at the location of the detention basins on the front (east side) of the site distant from the bioretention basins and apparently in a different geological formation. One test produced results as high as 982 inches per hour, which means CFC was basically pouring water down a crack. It is not reliable or helpful information.³ CFC refers us to another testing interval and claims that it determined the infiltration rate of “shale soil” to be 12.3 inches per hour. (Test pit RG1-TP4.) This “shale soil” may or may not be the backfill soil. Sampling of the soil *in situ* is of debatable value. 12.3 inches per hour is actually above the regulatorily preferred rate. To be precise, one run of the test that CFC referred us to produced a rate of 21.8 inches per hour but was not run for an hour, which CFC then averaged with 9.3, 9.0, and 9.3 inches per hour from the other runs to arrive at the 12.3 average. We are not satisfied that this data provides a sound basis for the design of the bioretention basins. And, of course, CFC used an assumed rate rather than any of this data anyway.

² The Appellants’ expert credibly opined that such testing would have been of limited value because the *in situ* soil’s structure and characteristics would have been changed once it was excavated and then used as backfill and compacted.

³ Also, infiltration that is too fast can be just as problematic as infiltration that is too slow because, *inter alia*, it does not allow for pollutant removal.

CFC's expert engineer testified that it was understandable that CFC did not do any *laboratory* testing of the soils, noting correctly that laboratory tests are strongly discouraged by the Department. (App. Ex. 32, App. C at 4.) Of course, the reason lab testing is discouraged goes to the main problem with CFC's plan, which is that it is not based on any supporting *field* testing, which is the gold standard. We are not encouraging lab testing, but we also cannot agree that no testing is better than lab testing.

In the absence of representative testing of any infiltrating soils, CFC and the Department rely heavily if not exclusively upon infiltration of bedrock beneath the basins. This strikes us as highly unusual, at best. 25 Pa. Code § 102.8(g)(1) specifically refers to testing of soil. Bedrock is generally considered to be the limiting zone. Pollutants are to be removed by infiltration through soil before the water hits bedrock. Here, there will be several feet of as yet untested fill above the bedrock. CFC has not used the bedrock data anyway. It instead has simply assumed an infiltration rate of 2 inches per hour and designed its system based on that assumption. This leaves us with the impression that the bedrock testing was done to give the appearance of compliance with the regulatory requirement when in fact the data is essentially meaningless.

There is, however, an even a more serious problem with CFC's bedrock testing. CFC's expert hydrogeologist admitted that his testing method for measuring infiltration in the bedrock was not only "contrived," but generally not accepted. The Appellants' expert confirmed this, and added several additional reasons why the tests were not trustworthy, which we will not belabor here. The results will, therefore, likely be inadmissible and useless for our *de novo* review.

In the absence of data, the Department has basically approved an experiment. It hopes that testing after excavation and during backfilling will show that CFC's assumptions were

correct and the design is acceptable. However, for good reason, the regulation requires *predevelopment* testing. By the time of the testing proposed by CFC, the site will already have been substantially altered using a site design based on the assumption that these basins with these dimensions in these locations can be made to work. The Department's approach turns the scientific method on its head. It is like testing a bridge after it is mostly built. *See also Pa. Env'tl. Def. Found. v. Cmwlth.*, 108 A.3d 140, 156 (Pa. Cmwlth. 2015) (quoting *Robinson Twp. v. Cmwlth.*, 83 A.3d 901, 952 (Pa. 2013) ("The first clause of the Environmental Rights Amendment 'requires each branch of government to consider *in advance of proceeding* the environmental effect of any proposed action on the constitutionally protected features.'")) (emphasis added). In addition, the Appellants' expert credibly opined that the testing during construction and before long term settling can only yield suspect data that may not be a reliable indicator of long term performance, particularly when using uncleaned, onsite soils that are likely to contain fine particles. As discussed more fully below, some of this testing, particularly at the lower levels, may be below groundwater levels.

We are trying to imagine why the Department would not insist on appropriate predevelopment testing to verify that a proposed infiltration system will work. It might be that the Department believes that it has the authority to waive the regulatory requirement based on site-specific circumstances. There is nothing in Chapter 102 that we see to support such authority, but in any event, the Department did not specifically contend that it had such authority in the proceedings so far. To the contrary, the Department's permit reviewer testified that no permit coverage can be approved without site-specific testing. To this we would add that the testing results must actually support the design choices that are made. If the Department believes it would be a good idea to change the regulatory language to allow for greater flexibility, it may

pursue such a course with the Environmental Quality Board, but this Board does not have the authority to disregard a regulation as written.

The next imagined explanation is that testing can be excused because the applicant has a clear contingency plan in place in case the system does not work as hoped. Here, CFC's plan is not at all clear on what happens if its assumed rate of infiltration is not met during construction. Chisel plowing will be tried first, but if that does not work the plan merely says "the owner shall contact an engineer and the municipality on replacement and/or repair as required." The plan describes measures to be followed to try and tweak the system as construction proceeds, but there is no Plan B if those tweaks do not work. If the Department is willing to approve an untested experiment based on no data, it should at a minimum insist on a well defined contingency plan. Here, there is no such plan.

It might be that the Department thinks that testing can be excused because the Department has approved such systems many times before and knows from experience that a design such as CFC's will perform as planned. Again, this does not seem to be consistent with the regulatory language, but putting that aside, the factual predicate is not present. To the contrary, CFC's approach is unusual and, based on the existing record, untested. The Department's permit reviewer testified that, out of the 190 permit reviews he had been involved in, only three or so resembled CFC's approach. He did not say whether the Department has verified that those other systems worked. He also said that he could not say one way or the other that situations that he is aware of where systems have failed generally were based on a faulty design as opposed to faulty construction or maintenance.

The Department's other expert witness referred to situations where basins at other sites have needed to be retrofitted, presumably because they were not working. It was not clear from

the testimony whether the Department studied the retrofits to see if they had been successful. We expect that it would be preferable to design and build systems that do not need to be retrofitted in the first place.

The Appellants' expert credibly opined that CFC's system is highly unusual and not at all common. We are unable to conclude at this point that CFC's lack of data to support its design is excused due to a substantial experiential basis for concluding that the system will be effective.

Along the same lines, CFC's system departs in multiple and fundamental ways from the Department's guidance manuals. The Department's Erosion and Sediment Pollution Control Manual says that "compaction" (also called layering) results "when machinery or other pressure breaks soil structure and increases its bulk density. Structure is crushed and disintegrates, causing the collapse of large pore spaces *essential for rapid water, air, and root movement.*" (App. Ex. 33 at 493 (emphasis added).) Similarly, the Stormwater Manual says "[c]ompaction by people or equipment crushes soil structure, impeding air, water, and root movements." (App. Ex. 32 at 483.) The manual describes soil structure and the effects to soil structure from disruption as follows:

Soil structure is how the individual soil particles (sand, silt, clay) are arranged, aggregated, held, or come together in peds or clods. Thus, the size and form of soil aggregation is known as soil structure. Good soil structure allows for water and air infiltration and movement, as well as for root growth. Soil structure is developed over time through rain, frost, or other weather impacts. It is also affected by the amount and type of organic material that leaches into a soil over time. Although developed over time in nature, structure can be destroyed quickly by machinery, grazing livestock, cultivation, or other human impacts.

....

Structure is crushed and destroyed by compaction or smashed and destroyed by rough treatment. In soils that have been damaged by construction, structure is often compressed, crushed, or compacted—especially in clay soils. This means soil pore spaces are crushed

and a soil becomes layered (platy) and water, air, and roots have a difficult, if not impossible, time moving into and through the soil.

(*Id.* at 486.) CFC does not intend to compact the top two feet of fill in the basins, but all of the deeper layers of fill will be “compacted” to 85-percent minimum density. (Plan at 4.) The success of CFC’s system is said to depend on achieving just the right level of compaction. Too much compaction means not enough infiltration; not enough compaction means fast infiltration with no pollutant removal. Note that the operative variable in CFC’s plan is compaction, not soil type. This is exactly the opposite of the theme presented in the manuals.

The Stormwater Manual notes that, “[w]hen soil is disturbed...the soil is compacted, macropores are smashed and the natural soil structure is altered. Soil permeability characteristics are substantially reduced.” (App Ex. 32, Chap. 2 at 10.) Disturbance and compaction “destroy the permeability of the natural soil.” (*Id.*, Chap. 3 at 2.)

The E&S Manual says, “Transition zones, caused by dumping one type of soil on another, are often impermeable barriers to water, air, and roots.” (App Ex. 33 at 484.) CFC’s plan calls for as much as three different types of soil to be used in the construction of Bioretention Basin 1 (shaley fill, existing sandy-loam, and amended soils).

The parties dispute whether Section 6.4.2, titled “Infiltration Basin,” or 6.4.5, titled “Rain Garden/Bioretention” in the Stormwater Manual applies to CFC’s Bioretention Basins. We are not sure labels and semantics are that important. It seems that CFC’s basins do not perfectly fit within either type of BMP, and they have certain aspects of both types of infiltration BMPs. The large *basins* that CFC is proposing may not perfectly fit the general conception of a rain *garden*. It is difficult to think of them as “gardens.” Infiltration basins actually seem to be a more apt description of CFC’s basins. In any event, both sections repeatedly warn against compacting *in situ* soils. (Chap. 6 at 27, 30, 31, 59.) They both tell the designer to rely upon the natural

infiltration provided by undisturbed existing soil. (Chap. 6 at 27, 28, 29, 30, 31, 59.) Both sections incorporate Protocols 1 and 2, which discuss site evaluation and soil infiltration testing and infiltration systems design and construction, respectively. Protocol 1 (Appendix C) notes that many sites are simply not suitable for infiltration BMPs. It says that it is important that test pits provide information related to conditions at the bottom of the proposed infiltration BMP. The protocol “strongly” recommends the use of an infiltrometer. Protocol 2 says yet again, “**Do Not Infiltrate in Compacted Fill.**” (Emphasis original.) The existing soil mantle should be preserved to the maximum extent possible. Excessive excavation for the construction of infiltration systems is strongly discouraged.

To the extent Section 6.4.2 (Infiltration Basins) is helpful and provides good advice, it warns against installing basins on recently placed fill (less than 5 years). A two-foot separation to bedrock and the seasonally high water table must be maintained using natural, uncompacted soils with acceptable infiltration capacity.

The manuals advise against the use of compacted soils in infiltration BMPs so many times that they start to sound like a broken record, yet that is what CFC intends to do. The manual emphasizes that meaningful testing is required. There is none here. The manual says not to use recently placed fill, but CFC is going to do that here. The manual suggests a two-foot separation from the seasonal high water table, but whether that is possible here is not clear.

In an effort to conform its plan with the guidance manuals, CFC tells us that the manuals’ repeated warnings about employing infiltration on top of compacted fill only refer to the 98% compaction rate used under buildings. We do not see that qualification in the manuals. CFC also says it is not really “compacting” the fill so much as “consolidating” it. Compaction is one form of consolidation, but word play is not particularly significant, and CFC’s plan itself refers

to compaction (Plan at 4.) CFC's basins could not be built as designed without compaction, in the case of BB-2, down approximately 15 feet.

We understand why CFC would want to explain its deviation from the guidance manuals, but it was strange to watch the Department pooh-pooh its own manuals repeatedly throughout the supersedeas hearing. Although the manuals are the product of considerable study and work and are presumably relied upon daily by the regulated community, the Department told us among other things that its Stormwater Manual is now "dated." It repeatedly emphasized that manuals can and indeed should be disregarded under certain circumstances. It directs our attention to 25 Pa. Code § 102.11, which allows an applicant to propose alternative BMPs and design standards (although we note it does so only after first directing applicants to refer to the manuals, which suggests that the manuals are the best starting point for any design). Despite the Department's efforts to minimize the importance of its own manuals in order to support CFC's efforts in this case, we do not have the sense that the Department is retreating from the fundamental principles that underlie the manuals. In any event, our primary reason for referring to the manuals here is to reinforce our point that our CFC's system is unusual and, therefore, is particularly in need of supporting data.

Groundwater

An understanding of the hydrogeology of a site can be important at some sites in designing a stormwater management system for any number of reasons. *See generally Crum Creek Neighbors v. DEP*, 2009 EHB 548. Among other things, it is desirable to maintain a 2-foot clearance above a regularly occurring seasonally high water table. (App. Ex. 32, App. C at 14.) If groundwater is higher than or just below the surface of the infiltration bed, it could throw

off design calculations, affect the operation of the system, and not allow sufficient distance of water movement through the soil to allow adequate pollutant removal.

The Appellants raise the concern that the bioretention basins are located in an inappropriate location because there are strong indications that there may be shallow groundwater in the bottom of the bowl where the basins are located that could alter the design calculations or interfere with the operation of the basins. At a minimum, they complain that the clear possibility of shallow groundwater was not properly discounted by CFC or considered by the Department. The Appellants did not call an expert hydrogeologist as a witness, but through the direct and cross-examination of other witnesses they raised a number of points to support their concern. The Department also did not call a hydrogeologist as a witness. The only geologist to testify was Carl Boyer on behalf of CFC. If the Appellants' groundwater challenge were the only concern, it would not independently support the grant of a supersedeas, but in combination with the other deficiencies in CFC's plan, it provides added support for our ruling.

Infiltration BMPs should not be located where a high water table will interfere with their operation. Mottling is a well known and accepted indicator of a seasonal water table. It is commonly relied upon in, e.g., identifying wetlands and siting septic systems. As previously mentioned, neither we nor the Department have the benefit of any logs for the key test pits of CB1 and CB2. CFC's geologist conceded that mottling was in fact seen in those pits, and he said that that information would have been useful, but he did not report it. He said he did not report it because CFC is removing all of the soils anyway. This may not be true for BB-2, but even if it were true, the fact that the soils are being removed does not render the information any less valuable in assessing whether there is a seasonal high water table.

The Sewage Enforcement Officer (SEO) for the area prepared Site Investigation and Percolation Test Reports in the area of the basins. The test at BB-1 revealed a seep at 11 inches below the surface. There were “faint common medium mottles” between 11 and 18 inches, and “many coarse prominent mottles” between 18 inches below the surface and the bottom of the test. The perc test for the location of BB-2 revealed “faint common medium mottles” between 9 and 19 inches below surface and “common faint medium mottles, slicken sides” below 19 inches. Thus, CFC proposes to install infiltration BMPs in an area that was not even deemed to be suitable for on-lot sewage disposal due to mottling and a seep indicating the presence of a high water table.

The Department’s engineer said that he was not concerned by mottling at this site because unidentified additional documentation was provided and he was advised by the Department’s hydrogeologist that the mottles resulted from “water slowly going down, not up.” This is of course hearsay testimony from an engineer not expert in hydrogeology, but putting that aside, if there is a seasonal high water table a foot below the surface, we will look forward to additional explanation on why it matters that water at that level “came from down, not up.”

CFC and the Department seemed to discount the possibility of a seasonal high water table in significant part because the main aquifer on the site appears to be at least 35 feet below the surface. However, contrary to what CFC avers in its response to the petition for supersedeas, it does not appear that the bioretention basins “are at least twenty feet higher than the shallowest documented water tables at the Property.” (Response at 6.) To the contrary, there are several indications that there is a perched aquifer at a higher level in the bowl where the basins are to be located. A seasonal high water table would not be remote from such a perched aquifer.

The topography of the site is consistent with the presence of a shallow aquifer. There is a flowing spring that emerges from the side of the hill at about 800' to 810' above sea level.⁴ The narrative of test pits CB1 and CB2 where the basins are to be located showed there was some moisture at the bedrock interface, which is 9 feet below the surface at BB-1 and 14.5 feet below the surface at the location of BB-2. A test boring said to have been completed by a CFC contractor 60 feet north of the wetland area at the headwaters of the southern UNT corresponding with a surface elevation of 808' ASL was said to have encountered rock at 3 feet and groundwater at 33 feet, but measurements taken 30 minutes after construction found a "piezometric surface" at a depth of 9 feet below surface (799' ASL).

The presence of a perched aquifer may raise a unique concern at this site. Here, if the aquifer exists, it appears to exist at the level where CFC proposes to start its backfilling process immediately above bedrock. CFC's plan depends on meeting a 2-inch per hour infiltration rate at all levels, including the level where there may be a preexisting aquifer.

Article I, Section 27

The Appellants argue in their petition that the Department's granting of approval for coverage under the PAG-2 permit is in violation of the Department's obligations under Article I, Section 27 of the Pennsylvania Constitution. Article I, Section 27 provides:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

⁴ There does not appear to have been any analysis of what, if any, impact the site modifications will have on the spring, which appears to feed the headwaters for the southern UNT and associated wetlands. The Department's Kenneth Murin testified that such an analyses needs to be done but he did not know whether it was done.

PA. CONST. art. I, § 27. In order to assess whether the Department has fulfilled its constitutional obligations under Article I, Section 27, we ask the following three questions:

- (1) Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's public natural resources?
- (2) Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum?
- (3) Does the environmental harm which will result from the challenged decision or action so clearly outweigh the benefits to be derived therefrom that to proceed further would be an abuse of discretion?

Stedge v. DEP, EHB Docket No. 2014-042-L, slip op. at 40-41 (Adjudication, Aug. 21, 2015) (quoting *Payne v. Kassab*, 312 A.2d 86, 94 (Pa. Cmwlth. 1973), *aff'd*, 361 A.2d 263 (Pa. 1976)); *Brockway Borough Mun. Auth. v. DEP*, EHB Docket No. 2013-080-L, slip op. at 29 (Adjudication, Apr. 24, 2015); *see Pa. Envtl. Def. Found. v. Cmwlth.*, 108 A.3d 140, 159 (Pa. Cmwlth. 2015) (holding that the *Payne* test is still good law); *see also Feudale v. Aqua Pa., Inc.*, No. 335 M.D. 2014, 2015 Pa. Commw. LEXIS 331, at *14 (Pa. Cmwlth. Jul. 22, 2015) (analyzing second and third prongs of *Payne* test after finding compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's resources under the first prong).

The issue we are presented with in this appeal is, how are we to evaluate whether there has been a reasonable effort to reduce the “environmental incursion” to a minimum? Is the “environmental incursion” specific to the stormwater management system that is the subject of this appeal, or the CAFO more generally? Similarly, when we weigh harms and benefits, are we to consider the harms and benefits of the stormwater system by itself or the CAFO as a whole? The Appellants direct us to the CAFO as a whole and point to the many harms allegedly associated with such an operation at this location. CFC argues that we must restrict our review

to the stormwater system and coverage approval, and CFC filed a motion in limine in support of that view, but it must also be noted that it also discusses the many benefits of the project.

Although the Appellants' likelihood of success on this important issue would not have by itself justified issuance of a supersedeas, their point may have some merit. Although the evidence at this point is not well developed, our impression is that the Department may not have considered the broader implications of a CAFO at this location when it approved the stormwater coverage. There have been no less than five permits and approvals relating to this project. We have no sense at this point regarding the extent to which all of the Department's reviews leading up to the issuances of all of these approvals were conducted in a coordinated fashion with an eye toward reducing the environmental incursion (or, perhaps, incursions) to a minimum. The courts and this Board in the cases cited above were focused on an entire project, not individual components of a project. Focusing exclusively on an individual aspect of a project seems rather artificial. The piecemeal review advocated by CFC brings to mind the story of a blind man feeling the trunk of an elephant who thinks he has found a snake.

We may not need to get into the constitutional question because a holistic approach is actually mandated under case law regarding the Department's statutory and regulatory obligations. For example, in *Tinicum Township v. DEP*, 2002 EHB 822, 834-35, in the course of granting a supersedeas, we said, "The Department's highly compartmentalized approach is also inconsistent with this Board's holding in *Oley Township v. DEP*, 1996 EHB 1098, which held that the Department, when reviewing one permit application, should not ignore the effect the project may have on media or conditions typically permitted under other programs." 25 Pa. Code § 92a.36 reads, in part:

The Department will not issue an NPDES permit unless the application is complete and the documentation submitted meets the

requirements of this chapter. The applicant, through the application and its supporting documentation, shall demonstrate that the application is consistent with:

....

- (2) Other applicable environmental laws and regulations administered by the Commonwealth, Federal environmental statutes and regulations, and if applicable, river basin commission requirements created by interstate compact.

CFC's narrow view that we cannot look beyond the stormwater coverage approval is not consistent with this law.

Taking a broader view could very well inure to the benefit of CFC. For example, CFC has pushed for as much infiltration (as opposed to pure rate control) as possible, and it has bunched its project together at the back end of the site, both of which are arguably positive measures but both of which have constrained its stormwater choices. Designing the site this way put more distance between active operations and Big Cove Creek. We are told it is a good placement for odor control. It might be argued that it better preserves the scenic and esthetic values of the area. Of course, we never get to these considerations if regulatory compliance, the first step in the *Payne* analysis, is not achieved, and regulatory compliance requires something more than smoke and mirrors. 25 Pa. Code § 102.8.

Granting the Appellants' supersedeas petition will put this Board in a better position to consider all of the pending appeals relating to this project in a more systematic way and fulfill *our* obligations with respect to Article I, Section 27. We encourage the parties to propose a consolidated case management schedule, and we are very receptive to an expedited timetable.

Harm to Appellants or Public if Supersedeas is Not Granted

Once the first shovel of dirt is turned, this greenfield site will be irrevocably altered. CFC plans to move 190,000 to 200,000 yards of dirt, undertake 30-foot cuts, 40-foot fills, and compact and stabilize 2:1 fill slopes and 1.75:1 cut slopes. That is a considerable amount of

imminent earthmoving. We disagree with counsel for CFC's contention that such considerable earthmoving activity is "reversible." We believe that the site will as a practical matter be permanently and irreversibly changed by this earthmoving. We are concerned that finishing the earthmoving project as planned this fall could as a practical matter render this Board's review essentially meaningless.

If there is a strong likelihood of success on the merits of a claim that the Department violated the law, the analysis of irreparable harm is made easier by the principle that a finding of likely unlawful activity is tantamount to a finding that the Department's action is injurious to the public, which is equivalent to irreparable injury for purposes of evaluating a petition for supersedeas. *Delaware Riverkeeper Network v. DEP*, 2013 EHB 60, 63; *Rausch Creek Land, LP v. DEP*, 2011 EHB 708, 710, 727-28; *Harriman Coal Corp. v. DEP*, 2001 EHB 234, 251-52. See also *SEIU Healthcare Pa. v. Cmwlt.*, 104 A.3d 495, 508 (Pa. 2014); *Pa. Pub. Utility Comm'n v. Israel*, 52 A. 2d 317, 321 (Pa. 1947); *Philips Bros. Elec. Contrs., Inc. v. Valley Forge Sewer Auth.*, 999 A.2d 652, 657-58 (Pa. Cmwlt. 2010); *Cent. Dauphin Educ. Ass'n v. Cent. Dauphin Sch. Dist.*, 792 A.2d 691, 698 (Pa. Cmwlt. 2001). The idea behind this principle is that a petitioner should not be required to prove that the agency acted unlawfully *and* that actual harm will result from that unlawful activity. It is presumed that the Legislature or in this case the Environmental Quality Board was trying to prevent harm in the first place by promulgating the applicable regulations. It is counterintuitive to allow a project to move forward notwithstanding a likely finding that the Department acted unlawfully in approving it. Here, the Appellants have made a strong showing that the Department did not act consistently with the applicable regulations when it approved CFC's plan, which constitutes irreparable harm *per se*.⁵

⁵ A violation of a regulation is, of course, a violation of the statute as well. 35 P.S. § 691.611.

We would add that, without data, just as CFC and the Department cannot prove the system *will* perform, it is unrealistic to think that the Appellants could or should prove that the facility will *not* perform. The Appellants in this case should not be required to prove the negative of the showing required under the regulations for purposes of a supersedeas. *See Sludge Free UMBT v. DEP*, EHB Docket No. 2014-015-L, slip op. at 16 (Opinion, July 1, 2015) (citing *Blue Mountain Pres. Ass'n v. DEP*, 2006 EHB 589, 605-06 (no showing necessarily required that project will degrade waters; only need to show Department failed to perform proper analysis)). The Appellants' likely success in showing that the Department approved the project without the regulatorily required demonstration is sufficient to support a supersedeas.

CFC and the Department argue that there cannot possibly be any harm because post construction inspections and Departmental enforcement coupled with onsite repairs can guarantee there will be no problems. The argument departs even further from regulatory requirements than the Department's argument that testing concurrent with development satisfies the requirement for predevelopment testing. The argument is legally unsound because the Department should not be issuing permits that are not well supported based on the idea that a facility can be repaired after it fails. It is also factually unsound. There is an insufficient record to support a finding that those basins can in fact be repaired or replaced. Inspections post construction are infrequent.⁶ A major failure could happen the first day or take years to manifest. As previously mentioned, other than chisel plowing, there is no contingency plan in place if there is a failure.

Although no showing of actual harm is necessary where, as here, there is irreparable harm *per se*, and we have not required the Appellants to prove at this point that the stormwater

⁶ The Department incorrectly relied on Part A.2.a. of the permit for the proposition that there must be weekly inspections and inspections after rain events. That provision only applies during active construction. Post construction inspections only occur once or twice a year.

system will not work, we would like to add that it *is* possible to evaluate worst-case scenarios without regard to how likely it is that those scenarios will come to pass, and in that respect the Appellants' case was weak. CFC's expert engineer testified that it does not matter whether the infiltration basins perform as designed because the regulatory criteria for rate and volume control will be met or only exceeded by *de minimus* amounts regardless, so long as loading ratios are met, which they are here. Although the engineer's opinion would suggest that careful study and design is a waste of time, which seems odd and makes us wonder whether the Department is requiring countless permit applicants to incur needless expense in performing superfluous tests, the Appellants did not directly challenge the opinion.

With respect to worst-case scenarios, there is little evidence at this point that even a dramatic failure of the basins would result in increased flooding of downstream properties, a materially adverse thermal impact, or degradation of receiving streams or stream channels. The Appellants' engineer states in his affidavit that the failed system will result in increased runoff volume, rate, frequency of discharge, pollutant load, and thermal impact, and will adversely impact the water quality of the receiving streams and the integrity of nearby stream channels. His theory, as expressed in the affidavit, is that, due to poor infiltration, the water in the basins will sit for a while, accumulate pollutants, heat up, and then overflow in storm events. He adopted and repeated the conclusions set forth in his affidavit during his testimony, but he added little in the way of detail that would flesh out his concerns regarding the threat of harm. He did not quantify any of the postulated consequences of a system failure.

Harm to CFC or Public if Supersedeas is Granted

The Department took an active role in these proceedings and supported CFC's positions throughout without exception. The Department argued against issuance of a supersedeas, but it

has not shown why a supersedeas would be harmful to the Commonwealth or the public. We note that the Department has been reviewing aspects of this project since early 2014. We have had an opportunity to consider the project for about a month.

We are not independently aware of any reason why the issuance of a supersedeas would harm the natural, scenic, historic, or esthetic values of the environment or in any way endanger public safety, welfare, or the environment. Denying a supersedeas comes with a risk of harm to the environment, although the actual proven risk to receiving streams appears to be small. Granting a supersedeas comes with no risk of harm to the environment or the public at all.

CFC is clearly harmed by the issuance of a supersedeas. That harm comes in the form of a delayed timetable. CFC did not present any evidence that it would lose its investment if a supersedeas is issued. There is no evidence of a permanent loss of a business opportunity as a result of the delay.

CFC originally hoped to have pigs on the site by this fall. That timetable obviously needed to be adjusted repeatedly, and there is no evidence that CFC was irreparably harmed by those adjustments. An additional adjustment to allow for careful and meaningful Board review is certainly unfortunate from the company's perspective, but it does not seem to rise to the level of causing irreparable harm. Even without a supersedeas, CFC did not plan to lay concrete until the spring, which would establish the foundation for the construction of the facility's buildings. No pigs would have been on site until October or November 2016.

We understand and appreciate that CFC is anxious to get started after a protracted permitting and land development process. However, this is a new greenfield development. This is not a case where an ongoing business is being shuttered, ongoing production or sales have been stopped, or employees are being laid off. *Compare M.C. Res. Dev. v. DEP*, EHB Docket

No. 2015-023-C (Opinion, May 7, 2015); *Tri County Waste Water Mgmt., Inc. v. DEP*, 2011 EHB 256; *UMCO Energy, Inc. v. DEP*, 2004 EHB 797; *Tire Jockey Servs., Inc. v. DEP*, 2001 EHB 1141; *Global Eco-logical Servs., Inc. v. DEP*, 1999 EHB 649. There is no evidence that construction has started or that significant mobilization costs have been incurred. There is no evidence of lost financing or financing opportunities or that CFC would violate any specific contracts. There were vague references to contracts with other farmers who will raise the pigs after a certain age, but no specific evidence that actual contractual commitments are threatened. There was an assertion that these farmers are constructing nurseries and finishing facilities in reliance on CFC's operation, but we have no testimony from any of these farmers or otherwise any other evidence establishing this claim.

CFC presented evidence of the benefits of the project, such as local employment and purchasing, the provision of housing for its pigs that is more humane than that which it currently provides at some of its other facilities, and providing a supply of pigs to raise and manure to use as fertilizer to other local farmers, but again, those benefits are being delayed, not irrevocably lost.⁷

CFC did not claim that delaying this project would have a material adverse effect on the Clemens family of companies. We are told that Clemens has numerous facilities throughout the northeast. We were not told that a supersedeas would result in a closure of any of those facilities or curtailment of company operations or production.

It is at least worth mentioning that CFC may bear some responsibility for the delays to its project. CFC put together a plan that has needed to be revised on multiple occasions, and that in our view still contains virtually no supportive data. The Department's lengthy and strongly

⁷ Of course, one person's "benefit" is another person's "harm." For example, the Appellants identify the increased use of pig manure in the local area as a harm, not a benefit.

worded October 21, 2014 deficiency letter reflects a plan that was not designed from the beginning to withstand vigorous review.⁸

CFC argued that it cannot develop the site if the Appellants are correct. There is no proof to support that statement. We suspect it is an overstatement. We were not shown that more appropriate studies are impossible. One thing that immediately comes to mind is CFC's unexplained failure to test the sandy loam soil in BB-1. We were not shown that other designs cannot be engineered. One thing that was alluded to at the hearing was the use of tested, clean offsite materials with established infiltration properties for backfilling. Still further, as far as we know, no alternatives analysis was performed or required. The Department's Stormwater Manual says that many sites will simply not be suitable for infiltration, but that does not mean that stormwater cannot be managed. "The management of post construction stormwater shall be planned and conducted *to the extent practicable.*" to meet regulatory goals. 25 Pa. Code § 102.8(b). We were not presented with any evidence on that question.

In the final analysis, our balancing of the criteria to be considered in deciding whether to supersede a Department action pending an adjudication on the merits led us to conclude that a supersedeas was warranted in this case. A copy of our August 27, 2015 Order is attached.

⁸ Interestingly, the parties, including Country View Farms, a Clemens company, have agreed to multiple extensions of prehearing deadlines in the Appellants' appeal of the approval of the nutrient management plan for the project and have shown anything but a sense of urgency in that appeal. At one point the parties asked for an open-ended extension with no firm dates even after we specifically told them not to do so. These extension requests may be explained by the fact that other permit applications were still pending at the time or because of other unknown reasons, or it may mean nothing at all, but we note it for the record. If the objective was to allow for a more coordinated review, we agree that that objective has merit.



ENVIRONMENTAL HEARING BOARD

s/ Bernard A. Labuskes, Jr.

BERNARD A. LABUSKES, JR.

Judge

DATED: September 1, 2015

c: DEP, General Law Division:

Attention: Maria Tolentino

(via electronic mail)

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COMMONWEALTH OF PENNSYLVANIA
ENVIRONMENTAL HEARING BOARD



MARJORIE HUDSON, LORNE SWOPE, :
DAVID LIPPERT, AND DELORES STEINER :

v. :

EHB Docket No. 2015-096-L

COMMONWEALTH OF PENNSYLVANIA, :
DEPARTMENT OF ENVIRONMENTAL :
PROTECTION and CFC FULTON :
PROPERTIES, LLC, Permittee :

ORDER

AND NOW, this 27th day of August, 2015, it is hereby ordered that the Appellants’ petition for supersedeas is **granted**. An Opinion in support of this Order will follow.

ENVIRONMENTAL HEARING BOARD

s/ Bernard A. Labuskes, Jr.

BERNARD A. LABUSKES, JR.
Judge

DATED: August 27, 2015

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