

Department of Environmental Management  
Administrative Adjudication Division  
State of Rhode Island  
Re: William & Donna Balcezak  
AAD No. 07-017/ISA  
Application No. 0405-1861 A.M. 2 Lot 411  
2009

**DECISION AND ORDER**

This is an appeal before the Administrative Adjudication Division for Environmental Matters (“AAD”) of the Department of Environmental Management (“DEM”) filed by the Applicant William C. Balcezak and Donna L. Balcezak (“Appellant” or “Balcezak”) on October 23, 2007. The appeal seeks review of a Notice of Denial dated September 20, 2007 (“DENIAL”) of the Applicants' application to Alter a Freshwater Wetlands by instillation of a proposed individual sewer disposal system (“ISDS”).

Said appeal is properly before the Hearing Officer pursuant to the Freshwater Wetlands Act (R.I.G.L. Section 2-1-18 et seq.), statutes governing the Administrative Adjudication Division (R.I.G.L. Section 42-17.7-1 et seq.), the Rules and Regulations Governing the Enforcement of the Freshwater Wetlands Act (“Wetlands Regulations”), and the Administrative Rules of Practice and Procedure for the Department of Environmental Management, Administrative Adjudication Division for Environmental Matters. The hearing was conducted in accordance with the above-noted statutes and regulations.

The Applicants were represented by Melissa M. Horne, and the Office of Water Resources (“OWR”) was represented by John A. Langlois. An Administrative Hearing was held on October 27, 28, 29 and December 8 and 9 of 2008. Applicants filed a post-hearing memorandum on February 6, 2009. OWR filed its post-hearing memorandum on March 25, 2009. Applicant filed a reply memorandum on April 14, 2009. OWR filed a reply supplemental memorandum on April 24, 2009.

**BACKGROUND AND TRAVEL**

On August 10, 2006 Applicants filed No. 0405-1861 with OWR requesting a permit to install an ISDS unit on property they owned in Charlestown, Rhode Island and more specifically identified as Lot 411 of Assessor's Map 2. The Applicants requested two (2) variances from the requirements of the ISDS Regulations.

The first variance Applicants sought was relief from SD 15.02 (a) and (b) in the ISDS Regulations which states that no ISDS shall be installed in any area where the groundwater table is within four (4) feet of the original ground surface or that only disposal trenches will be allowed in areas where the groundwater table is within two (2) to four (4) feet of the original ground surface.

The second variance was from the Critical Resource Area Section 19.02.5 of the ISDS Regulations which states that the installation of the individual sewer system is prohibited in any area where the groundwater table is within five (5) feet of the original ground surface.

The Applicants proposed an ISDS consisting of an AdvanTex Treatment system (AX-20) with a Bottomless Sand Filter (BSF) drain field. The application was denied and the Applicants were notified of the denial by letter dated September 20, 2007. The Applicants properly requested an administrative appeal in a timely manner.

A Prehearing was held on April 18, 2008. OWR identified six (6) witnesses and the Applicants identified eight (8) witnesses which they intend to present at the Administrative Hearing. The parties submitted exhibits which were marked for identification and there was no agreement

admitting any of the exhibits as Full at that time. There were no Stipulations of Fact at the Prehearing Conference.

The Administrative Hearing was originally scheduled for June 16, 17 and 18 of 2009 but continued at the request of Applicant due to a scheduling conflict. On September 9, 2008 Attorney Margaret L. Hogan filed a Withdrawal of Appearance as Applicants' attorney. On September 16, 2008 Attorney Melissa M. Horne filed an Entry of Appearance as Applicants' attorney. On September 24, 2009 a Notice Rescheduling the Administrative Hearing on October 27, 28 and 29, 2008 was issued. On October 22, 2008 counsel for Applicants filed a document entitled Appellants' Amended Rule 3 Pre-hearing Conference Submission. The Administrative Hearing was held on October 27, 28 and 29, 2009. The Administrative Hearing was continued to December 8 and 9, 2008 at which time it was completed.

## **HEARING SUMMARY**

The Applicants' first witness was David Kalen, whose resume was introduced as Applicants' Exhibit 5 Full, who is an environmental engineer and licensed soil evaluator. He holds a Class IV soil evaluator's license and a Class I ISDS designer and installer license. He was recognized as an expert in soil evaluation without objection.

Mr. Kalen testified that he performed soil evaluations on the subject premises in September of 2004 and May of 2006. On September 2, 2004 he dug four (4) holes. Mr. Kalen referred to Applicants' Exhibit #17 for ID during his testimony. He discussed how the test holes serve to establish a seasonal highwater table (SHWT). The redoximorphic features in the soil establishes the SHWT. He testified that the soil was in soil category IV.

The test holes were labeled A, B, C and D. The estimated seasonal highwater table (ESHWT) at test holes A and B were determined to be thirteen (13) inches. He had noted on Item 11 of Applicants' Exhibit #17 for ID that the SHWT was thirteen (13) inches throughout. He later testified that it is not possible to state exactly where the water is. He testified that on September 2, 2004 a representative of DEM was present at the site and concurred with the soil evaluator's findings. This DEM representative was Paul Duhamel.

Mr. Kalen testified that he conducted another said evaluation on May 25, 2006. He did this at Mr. Balcezak's request. He conducted soil evaluations on holes identified as E and F on Applicants' Exhibit #17 for ID. A test hole G was dug but not described. In test holes F and G the ESHWT was determined to be six (6) inches. Mr. Kalen testified as to the possible reasons that test holes F and G had a higher ESHWT. He said that the area around test hole F could have been impacted by the construction of Midland Road. The test holes were to the east of the proposed ISDS and were up gradient. He repeated his previous opinion that the soil was category IV.

Mr. Kalen about the operation of the BSF. He testified as to his familiarity with the system and courses taken at URI relating to BSF systems. Counsel for DEM conducted a voir dire of the witness regarding the different levels of licensing. Over DEM's objection Mr. Kalen was recognized as an expert in the general functions of BSF systems and not how this specific system works. Mr. Kalen's opinion was that the soil could accept the outflow of four (4) gallons per square foot per day. This was based on soil category IV at 13 inches.

Mr. Kalen testified that he is familiar with the procedures for a groundwater table elevation determination in the ISDS Regulations. He acknowledged that under SD 17.02 of the Regulations groundwater table is more accurately measured in the wet season. He acknowledged that under SD 26.00 approval of the site evaluation by the DEM representative indicates only that it was conducted in compliance with the Regulations. It is not an indication of the correctness or quality of the site evaluation.

On cross examination Mr. Kalen repeated that he held a license as a soil evaluator and Class 1 designer. He testified that he is familiar with the ISDS Regulations and read Section SD 2.02 (F) out loud. He acknowledged that the Director can request more information. He testified that he is

also familiar with Section SD 20.00 of the Regulations. He testified that the Director's representative did not initially concur with the readings of test hole C and D. After test holes E and F were submitted the Director asked the evaluator to go back and do soil profiles for holes C and D.

Mr. Kalen testified that under the Regulations a new septic system groundwater table between two (2) and four (4) feet is acceptable. Four (4) feet is the standard. He said the groundwater table on the subject lot is thirteen (13) inches from the footprint of the BSF. He testified that he did not dig a test hole directly beneath the BSF because the regulations prohibit disturbance of the soil there. The BSF is closer to test hole G than E. The groundwater table of May 25, 2006 in Exhibit 17 test hole E was thirteen (13) inches, test hole F was six (6) inches and test hole G was six (6) inches. The test results from the hole closest to the proposed BSF is (six) 6 inches.

Mr. Kalen was questioned about the relationship of test holes to the proposed BSF and he stated that he did not have the BSF drawn on his sketches. He was challenged about his expert opinion if he did not know the exact location. He testified that he did not know if a wet season evaluation was done at the subject location. He did know that DEM had requested a wet season evaluation. The witness described the manner and method of wet season evaluation.

Mr. Kalen acknowledged that in his September 2, 2004 report he had stated "seasonal highwater table estimated at thirteen (13) inches throughout" (Tr. Vol. 1 pg. 89). Later in 2006 he saw seasonal highwater tables of six (6) inches. The witness was questioned about his direct testimony on test hole F. He testified that he did not do any studies for drainage. He said generally you want less compacted soil. Medium soil is better.

Counsel questioned witness Kalen on the basis for arriving on a determination of seasonal water table by use of soil evaluation. He acknowledged that "the wet season is more accurate than the dry season seasonal highwater table determinations" (Tr. Vol. 1, pg 133). The witness described how a wet season test is performed. The use of redox features is a very good estimate he said. He testified that he had never done a wet season reading but believed that someone read the pipe. He said the reading was much deeper than where the redox features were found. He did not know if that information was ever submitted to DEM. He said he never considered doing a wet season test.

The witness was shown Applicants' Exhibit 10 for identification. The witness read the last paragraph of a letter dated April 18, 2007 as follows: "This soil evaluator, by reasons explained above, has declined to exercise his option of reading the test results during the wet season." (Tr. Vol. 1, pg. 140).

On redirect the witness acknowledged having performed two hundred (200) soil evaluations. He said none of those evaluations were challenged. On one occasion he performed a wet season test where he had done a soil evaluation. He said he does the soil evaluations in accordance with the regulations. He said that both the September 2, 2004 and May 25, 2006 site evaluations were disclaimed by the Director. The reason given for both disclaimers was that the estimated seasonal highwater table was less than 24 inches. He said that the Director never asked for more information from him as the site evaluator. Mr. Kalen's redirect testimony was completed with his opinion that the ESHWT under the footprint of the BSF would be thirteen (13) inches.

On recross counsel for OWR challenged the witness on his opinion which was clarified at approximately thirteen (13) inches. He testified that when he received a disclaimer of the 2004 report he contacted his client and gave him a copy. He did not disagree with it. He did the same with the 2006 disclaimer. The witness was questioned with regard to Regulation SD 15.02B. He said that the regulations say that if it is less than two (2) feet then it will be disclaimed.

Peter Duhamel was called as Applicants' next witness. He testified that he had been employed by DEM for approximately eighteen (18) years and holds the title of environmental scientist. He reviewed his educational background and job duties. He described generally the soil evaluation process. Mr. Duhamel testified that he witnessed the soil evaluation for the subject premises on September 2, 2004. He identified a document which he said was his inspection report. He

concurred with the soil evaluator that the ESHWT in Test Pits A and B. He examines as many Test Pits as the soil evaluator requests. He did not recall anyone at DEM indicating to him that additional tests were needed.

Michael Del Rossi was called as Applicants' next witness. Mr. Del Rossi testified as to his resume which was admitted by agreement as Applicants' Exhibit #6 Full. Mr. Del Rossi reviewed his educational background and said he is a professional engineer with a Class III septic system designer license. He works for MDR Engineering, Inc. for whom he did septic system designs since 1985. Mr. Del Rossi testified that he designed the pending ISDS system for the Applicants. He described in detail the workup of the AdvanTex AX 20 Unit and the BSF.

Mr. Del Rossi testified that the AdvanTex AX 20 unit is an advanced alternative treatment system which treats waste water better than a conventional system. It reduces the BOD and nitrogen significantly. The system also has a controlled release into the BSF depending upon the size of the BSF. In their case the BSF is six and a half (6 1/2) feet by twenty (20) feet which would call for a three (3) to one (1) ratio. The system is one of those alternative ISDS technologies that are approved by DEM for use in Rhode Island.

Mr. Del Rossi testified that he has designed over 300 ISDS systems for submission to DEM, approximately fifty (50) of which were systems like the one proposed by the Applicants. He said that one (1) was denied. Mr. Del Rossi was offered as an expert with regard to the ISDS design system submitted by the Applicants. Counsel for OWR objected and requested a brief voir dire. After the voir dire OWR renewed its objection. Mr. Del Rossi was recognized as an expert with regard to the ISDS system designed and submitted relative to the subject application.

Mr. Del Rossi testified that he designed the system submitted as part of the original application for variance, an AX 30 AdvanTex. Applicants' Exhibit #11 was admitted as a Full Exhibit over the objection of OWR. OWR objected to questioning as to a previous application in 2005 as irrelevant. He represented that the 2005 application was denied and no appeal was taken. The current application is a new application although it has the same application number. It was ruled that the 2005 application was not the subject of the pending appeal and would not be considered as relevant.

Mr. Del Rossi testified that he submitted a design in July 2006 which was reflected by Applicants' Exhibit #20 for Identification. It reflected a design for a two (2) bedroom house. Applicants' Exhibit #20 was admitted as a Full Exhibit. DEM responded with to the application nine (9) comments. Those comments included a request to "Provide Class IV report for test holes C and D" and "Provide wet season readings for all existing test pipes on Locust Lot". (Vol. II, pg. 51). He subsequently provided Class IV Report for test holes C and D.

Mr. Del Rossi reviewed the details of the proposed system. He testified that the BSF provided for a separation of 4.68 feet which is greater than the four (4) feet required in a critical resource area. He described how the BSF was constructed including a five (5) foot fill perimeter around the bottom to assist in any breakout. He testified that the loading rate for their system would be 300 gallons per day. Mr. Del Rossi testified that a BSF could be designed to function with a six (6) inch groundwater table by simply raising the system seven (7) inches higher.

The witness testified about the meaning of the term "breakout" as when the wastewater comes up through the ground. He said that the way the system is designed a breakout should not occur. The quality of water upon discharge would be single digit milligrams per liter of suspended solids and nineteen (19) milligrams of nitrogen per liter. Mr. Del Rossi testified that he did not think that the system would present a risk of a potential public or private nuisance. He also testified that he did not believe the proposed system would present a risk to public health. He testified that he did not believe that the proposed system would present a risk to the quality of the groundwater or surface water. He testified that the reason for his opinion was the watertight nature and effectiveness of the system. He testified that he was aware of another type of this system in Charleston, Rhode Island but that groundwater table was more than two (2) feet.

On cross examination Mr. Del Rossi testified that there is a wetland one hundred sixty (160) feet from the subject property but that this was an estimate. William Clark had prepared the plan showing elevations. Mr. Clark is not a registered surveyor. He never personally observed the surface water in the wetland but relied on Mr. Clark's plan.

Mr. Del Rossi testified that he believed that the groundwater classification in this area was probably GA. He did not review the DEM groundwater quality regulations but that he thought that since it was in a critical resource area it would probably be GA. A critical resource area was described as a highly sensitive area and the regulations require a four foot separation to groundwater instead of a three (3) foot separation. He said it is probably designated as a critical resource area due to its proximity to the coastal feature.

Mr. Del Rossi testified that the groundwater flow was toward the wetlands based on the elevations in the soil evaluations. The flow is to the west. The witness made notations on Applicants' Exhibit #20 Full of the groundwater table at test holes based on information contained in Applicants' Exhibit #17 Full. The witness described the method of evaluation.

Mr. Del Rossi testified that there are other technologies which would reduce BOD and suspended solids. These technologies included flow-reducing toilets and composting toilets. He testified that a composting toilet at this location would reduce the amount of BOD, suspended solids and nitrogen into the environment. He described how an incinerator toilet would eliminate any BOD, suspended solids or nitrogen discharge into the environment.

Mr. Del Rossi testified that the application and plan were modified after original comments from DEM on October 30, 2006. He acknowledged that the application did not comply with the regulations at that time but was not denied. The Applicant provided a response on March 21, 2007. DEM provided additional comments on April 3, 2007. This set of comments requested results for test holes C and D as well as wet season readings for all existing test pips on the subject lot. Mr. Del Rossi testified that his client did not instruct him to do a wet season reading and did not know if anyone else was requested to do so. He did not know if anyone ever conducted wet season tests on the subject premises.

Mr. Del Rossi testified about the post-installation maintenance requirements of the proposed system. He testified that if certain maintenance was not done the system could fail. It would not cause breakout but overflow the top. He said he was unaware of any studies in Rhode Island with regard to failure of these advanced treatment systems.

Mr. Del Rossi testified that he did not know the names of any abutting owners. He did not see any fill on the abutting property subsequent to the filing of the application and plan. He had not been on the subject premises in about two years.

Mr. Del Rossi testified that he had not reviewed the DEM file and is not aware of any information the file may contain except that which he submitted. His opinions were based on his submittals and not anything else.

On redirect Mr. Del Rossi testified that he chose the AdvanTex system with BSF because he considered it the best system. He proposed a bigger BSF than required by the Regulations, about a third larger than required. He reviewed why he thought that the system was fool proof. He testified that the comments made by DEM in April of 2007 were not design related but soil evaluation.

On recross Mr. Del Rossi testified about the relationship between soil evaluation and design. He testified that the system and the alarm were dependent upon electricity and that there is no provision for a generator.

The Applicants next called William Anderson. Mr. Anderson is a civil engineer with ISDS experience since 1988. He has a Class III designer's license and has submitted 30-40 AdvanTex BSF designs to RIDEM. Mr. Williams was offered as an expert and counsel for OWR conducted a brief voir dire. He was familiar with the plan filed by the Applicants and the subject premises. He testified that he has proposed a plan for the abutting property, "the Griffin lot". He has prepared a system for that lot comprised of a composting toilet and a Norweco Singlair system

for the graywater system. He has not looked at the DEM file or had a conversation with Mr. Del Rossi. Over OWR's objection Mr. Anderson was admitted as an expert for the purpose of interpreting the plans submitted and the AdvanTex BSF systems. Mr. Anderson's resume was admitted as Applicants' Exhibit #3 Full.

Mr. Anderson reviewed how the AdvanTex system will function as designed. He said it is a time closed system which works over a twenty-four (24) hour period and reduces surges. He testified that the treatment and discharge is anticipated as was testified to by Mr. Del Rossi. He testified about the safeguards in the system to deal with overloading or system failure.

Mr. Anderson testified that of all the thirty (30) to forty (40) AdvanTex systems he submitted to DEM only two (2) were not approved and one (1) of those was approved after refiguring the BSF. Of the DEM approved innovative systems he used two (2); the AdvanTex system and the FAST system. He chooses the AdvanTex system most often. He considered the AdvanTex system best for the subject premises. He testified that he is using a different system for the Griffin property. The Griffin property system consists of a composting toilet for the blackwater and an aeration system with Norweco Singulair system for the graywater.

He testified that the Griffin lot is similar to the Applicants' lot. It has a high water table and is in a critical resource area and has to deal with a wetland. He said just because Griffin is next to Balcezak does not necessarily mean that the system designed for the Applicants will not sufficiently protect the environment and public health.

Mr. Anderson testified about the disadvantages of the composting toilets. He said that the AdvanTex system was not usually used with composting toilets. He described breakout and mounding which he said had not occurred with the AdvanTex system to his knowledge. He testified that composting toilets cost about \$6,000 to \$7000 with some additional costs associated with installation. The total for a toilet and graywater system would be \$21,000. The cost of the AdvanTex system with BSF would be about \$32,000. There would also be an annual maintenance fee. Mr. Anderson testified that the AdvanTex with BSF was protective to the environment. He said the system as proposed would not present a risk to the quality of surface water or a risk of being a potential cause of a public or private nuisance.

On cross examination counsel for OWR questioned Mr. Anderson on Applicants' Exhibit #11 Full. He had never seen it before. He said the comments did not refer to the proposed system but the soil analysis on test holes C & D as well as wet season readings. Counsel questioned him on the location of test holes in relationship to the proposed BSF. He acknowledged that DEM questioned the thirteen (13) inch water table as accurate and requested more information. He was not show the response to DEM's comments by the Applicant.

Mr. Anderson testified that he preferred the system proposed because it treats both blackwater and graywater at the same time as opposed to two separate systems. He said that the composting toilet provided more treatment prior to leaving the house. Composting toilets will reduce more of the nitrogen, TSS and BOD.

On redirect examination Mr. Anderson said that even if you had a six (6) inch water table the BSF would provide a four (4) foot separation. On recross Mr. Anderson said the likelihood of a breakout would be greater with a six (6) inch water table depending on the system. He said he would not recommend a composting or incinerator toilet because of its older technology.

The parties stipulated to the admission of Applicants' Exhibit #1 as a Full Exhibit. It was identified as six (6) pages beginning with an application form and a document entitled "Request for Variance" with date stamp of August 10, 2006.

The Applicant William Balcezak was called as the next witness. Mr. Balcezak testified about his background, family history and familiarity with the area in which the subject premises is located. He described his intent for the parcel and investigation be conducted prior to purchase. He said he was concerned about the highwater table in the area but did not do any testing on the subject premises. His expectation was that he would have a twenty four (24) inch water table. He said that he had water table readings for two (2) lots in the area and based his expectation on the

relative elevations of the lots. He based some of his expectation results from placing a level on the road to estimate the grade. He anticipated using the AdvanTex system because he had seen them installed in this critical resource area. He testified that he was concerned with the environmental effects of conventional systems. After he purchased the property in April of 2003, he contacted Advanced Wastewater Technologies to design an AdvanTex style ISDS. He did not investigate other systems.

Mr. Balcezak testified that he filed his application on August 10, 2006 for two variances. The Application was denied on September 20, 2007. The letter of denial was marked without objection as Applicants' Exhibit #2 Full. The reasons for the denial were with regard to public health, nuisance and site suitability. He testified that as a result of the denial of the ISDS permit the property would be essentially useless to him. He would not be allowed to build a home on the lot. He considers the inability to build a home on the property as an extreme hardship.

On cross examination Mr. Balcezak testified that the assessed value for tax purposes of the property prior to his purchase was in the order of \$364,000. He paid \$213,000 for the property in 2003. After his first denial he applied for a reduction in tax assessment and the assessment was reduced to \$45,000.

He had estimated his water table prior to testing in the area of twenty-four (24) inches which he considered questionable. He said he understood the twenty-four (24) inch requirement by reading the regulations. He said that the only investigation of this property prior to purchase was his own. He had observed surface ponding on the northwest corner of the property. No one else had ever applied for an ISDS system for the property. His purchase of the property was not contingent upon any condition such as acceptable water table. He was not represented by an attorney and did not have an engineer or wetlands biologist. He said he relied on his own judgment.

When he purchased the property there were no test pipes on the property. Test pipes were installed but he said he never took readings from those test pipes. He said his father took readings from the test pipes and that the results were twenty-four (24) inches plus.

Mr. Balcezak was questioned by use of Applicants' Exhibit #20 Full. He identified the location of the test pipes. He said his father had taken readings but that he had never instructed his soil evaluator Mr. Kalen to take water table readings from the test pipes. He never instructed anyone to take wet season readings in those pipes. He was aware that DEM had requested wet season readings. Mr. Balcezak at first testified that he was never informed prior to the denial that DEM requested a wet season determination. He was questioned by use of Applicants' Exhibit #11 Full and asked to read from DEM's comments reflecting a variance meeting of April 3, 2007. That comment says "provide wet season readings for all existing test pipes on Locus lot." (Vol. III pg. 225). Mr. Balcezak stated that the DEM comments did not inform him that they had a concern about the water table. He interpreted DEM's request as another way to delay action on his application.

Mr. Balcezak testified that he never reported the wet season readings of greater than twenty-four (24) inches to Mr. Kalen, Mr. Del Rossi or Mr. Anderson. He also did not give DEM information about the greater than twenty-four (24) inch water table. He later testified that he did not report their information to anyone because he considered it more of an informal reading without scientific support. He never told his consultants about a twenty-four (24) plus inch water table or requested the consultants to take a measurement.

On redirect examination Mr. Balcezak testified that he did not think that the information that his father had determined was important. He did not think that water table was a problem. He said that the system they had designed would operate in a zero water table.

The Respondents called as their next witness Mohamed J. Freij. Mr. Freij identified himself as a principal engineer employed by the Department of Environmental Management with responsibilities of reviewing ISDS applications. He is familiar with the Balcezak application. He does not hold a Class IV soil evaluator's license or an ISDS installer's license. DEM has recognized innovative alternative systems as providing environmental protection in difficult sites.

The AX20 is an innovative alternative ISDS system approved by DEM. BSF systems are approved for shallow water table locations. He said that when he reviews an application he looks at the restrictions on that lot rather than the system proposed.

Mr. Freij reviewed the Balczak's application. HThe requested two variances are for less than twenty-four (24) inches to groundwater take and are for being in a flood plain. He said each lot is unique and they look at the drainage issues, flooding issues in the area and water table condition in the specific lot. He acknowledged that there was a notation in the file that CRMC had inspected lots 410 and 411 and identified surface water.

Mr. Freij was shown Applicants' Exhibit # 11 Full and identified it as the pink sheets relating to the subject application. He identified his handwriting in the comments section where it says "per variance meeting 4/3/07". The comment stated "Provide Class IV report for Test Holes C and D" and "Provide wet season readings for all existing test pipes or Locust lot" (Vol. V, pg. 33). He said he asked for wet season tests to get a more accurate picture of what is happening with seasonal highwater table (ESHWT) by soil evaluation. There were two rounds of soil evaluations performed on the property. The water table was never approved, it was disclaimed. Brian Moore had provided the comments from DEM in October of 2006 and he did not know why wet season tests were not requested at that time. Mr. Freij testified that the wet season reading could have been done in April after the request and would not have to wait until next winter. He said, "We were hoping to get out there within the next two weeks from 4/30/07 and take some readings." (Vol. V pg. 39). He did not know if the wet season had been extended but that based on his eighteen (18) years of experience doing this that they needed additional information to allow the Applicant to take some readings, regardless if it was not extended. They needed the readings to make an accurate decision.

Mr. Freij testified that the application was denied because they had requested wet season readings and the Applicants refused to provide that data. They felt that they did not have sufficient information to make a decision to approve it. The witness acknowledged that the Applicants' plan has 4.68 inches of separation from the top of the BSF to the water table.

Under cross examination Mr. Freij testified that since 1990 he had reviewed approximately 3000 Applicants. Mr. Freij was admitted as an expert without objection in the application of the ISDS regulations and individual sewage disposal systems. Mr. Freij read from Section SD 2.02 of the ISDS Regulations as follows:

"Nothing in these regulations shall prevent the director from requiring any additional information he or she deems necessary to carry out his or her obligations in enforcing these regulations". (Vol. V pg. 53). He said he requested the additional information because of discrepancies in the soil evaluations, some test holes had six (6) inches, some had thirteen (13) inches. In addition there was a report of surface water at the corner of an adjoining lot. A wet season test was requested and the Applicants did not provide it. He said we requested the wet season reading to determine that the water table was not at the surface.

Mr. Freij testified that neither he nor his staff had an objection to the AdvanTex or the BSF as proposed. He said that they needed accurate water table readings and that they did not ask for wet season test results to delay the application.

On redirect Mr. Freij testified that he never mentioned the CRMC report of standing water to the Applicants. Applicants' Exhibit #10 was marked Full by agreement. It was identified as Mr. Kalen's response to the April 2007 DEM comments. He was not sure if Mr. Kalen was aware of the CRMC report but it was not mentioned in the April 2007 comments. He said that if the water table is wrong the separation will be wrong. He said that although a test hole could not be placed under the BSF they could be placed very close to get a more accurate reading. Two (2) test holes are required but if the test hole numbers are disclaimed they need to explore other options to show DEM the exact conditions on that site.

Brian Moore was called as Applicants' next witness. He testified that he is employed by DEM as a supervising sanitary engineer. His attention was directed to Applicants' Exhibit #11 Full which

have previously been identified as the pink sheets from variance application No. 0405-1861. He acknowledges that the first nine (9) comments were his. He described the term “very difficult lot” which appeared in the comments as an effort to indicate to the Applicants and designer their initial impressions. The highwater table and the fact that it is in a floodplain were a concern. Mr. Moore was shown a document which he identified as a note taken at a meeting with Mr. Balcezak and his designer on May 4, 2006. The document was admitted as Applicants' Exhibit #21 Full over the objection of DEM. He said there was no informal meeting with the Applicants after the second application was denied because the Applicants did not request one. The Applicants rested after confirming that Applicants' Exhibit #10 had been admitted as a Full Exhibit. OWR rested.

## **ANALYSIS**

The Respondents have filed their appeal pursuant to SD 21.02 of the Rules and Regulations Establishing Minimum Standards Relating to Location, Design, Construction and Maintenance of Individual Sewage Disposal Systems, January 2002 (ISDS Regs) SD 21.02 provides as follows:

### **SD 21.02 Burden of Proof and Standard of Review**

(a) At the adjudicatory hearing, the applicant shall have the burden of proof to demonstrate through clear and convincing evidence that:

1. A literal enforcement of the regulations will result in unnecessary hardship;
2. That the system will function as proposed in the application; and
3. That the issuance of a permit will not be contrary to the public interest, public health and the environment.

(b) In order to demonstrate that the proposed Individual Sewage Disposal System will not be contrary to the public interest, public health and the environment, the applicant must introduce clear and convincing evidence to the satisfaction of the Director that:

1. The waste from the proposed system will not be a danger to public health;
2. The disposal system to be installed will be located, operated and maintained so as to prevent the contamination of any drinking water supply or tributary thereto;
3. The waste from the proposed system will not pollute any body of water or wetland;
4. The waste from the proposed system will not interfere with the public use and enjoyment of any recreational resource; and
5. The waste from the proposed system will not create a public or private nuisance.

(c) The Director, or his/her designee, may approve a permit or grant a variance from any provision of these rules and regulations where he/she finds that:

1. A literal enforcement of such provisions will result in unnecessary hardship to the applicant;
2. That the system will function as proposed in the application; and
3. That the permit or variance sought will not be contrary to the public interest, public health and the environment.

(d) The decision of the Director, or his/her designee, may contain such terms and conditions as he/she deems necessary to protect the public interest, public health and the environment.

The evidence to be considered by the Hearing Officer is limited to the documents' test results and matters considered by OWR at the time of the denial. The letter of denial was issued on September 20, 2007 and the appeal is directed to the question of whether OWR improperly denied the application for variance based on the information in its possession prior to that date. The Applicants have requested two (2) variances to the ISDS regulations. The Applicants sought relief from the requirements of SD 15.02 Site Suitability - General. SD 15.02 prohibits the installation of individual sewage disposal systems in any area where the groundwater table is within four (4) feet of the original ground surface. SD 19.02.5 prohibits the installation of an

individual sewage disposal system in a floodplain. The subject premise is located in a floodplain and the Applicants were not able to show a groundwater table of greater than two (2) feet. In fact the submissions of ESGWT were either approximately thirteen (13) inches or approximately six (6) inches.

The standard of review which OWR must apply in the granting of variances of the ISDS Regulations is set out in SD 20.02 which states:

### **SD 20.02 Variance Review Standards**

(a) Approval - A request for variance from the minimum standards set forth in these regulations shall be approved if it is determined that such a variance(s) will not be contrary to the public health, the public interest, or environmental quality.

(b) Denial - A request for variance from the minimum standards set forth in these regulations shall be denied when:

1. The evidence fails to demonstrate that the same degree of environmental protection provided under these regulations can be achieved without strict application of the provision for which the variance has been requested;
2. The evidence demonstrates that the individual sewage disposal system will not function as proposed in the application; or
3. The evidence indicates that the approval of the system would otherwise be contrary to the public health, the public interest, or environmental quality.

(c) Terms and Conditions - The variance decision may contain such terms and conditions as it deems necessary to protect the public interest and the public health.

OWR asserts that the Director has the right to request additional information relating to an application. ISDS Regulations SD 20.00(d) "Nothing herein shall prevent the Director or his/her designee from requesting additional information that he/she may deem appropriate." OWR refers also to SD 20.01(e) where the regulations state:

(c) Further Evaluation - Where the Director or his/her designee has reason to believe that groundwater and/or surface water quality at the site or surrounding area is a concern, or that the variance(s) requested will impact groundwater and/or surface water quality, he/she may require the applicant to submit a detained engineering evaluation discussing the impacts of the requested variance(s) on groundwater and/or surface water quality. Such evaluations may include, but not be limited to, geohydrologic evaluations and water quality impact analyses of the site and surrounding area.

OWR points out that the burden is on the Applicants to show that the proposed system would function as proposed and would not be contrary to the public interest and the public health. The Department has not presented evidence or argued that the AdvanTex AX-20 system with BSF would function well in a difficult water table situation. They take the position that the Applicants did not satisfy their burden of proof that the system would function as intended based on their uncertainty as to the ESHWT in the area of the proposed system. It is important to note that the review of the AAD is limited to the evidence provided as part of the application.

The application as submitted on August 10, 2006 indicated a thirteen (13) inch ESHWT. The highwater table and the fact that the subject lot is located in a floodplain were the reasons for the request for two (2) variances. The Department conducted a review of materials submitted including the Plan for Proposed ISDS (Applicants' Exhibit #20 Full) and the soil evaluator's report (Applicants' Exhibit #17 Full).

OWR issued comments reflecting its initial review on October 30, 2007 on what has been referred to as the "pink sheets" (Applicants' Exhibit #11 Full). These comments contained nine points. Included in the comments was a request for results from test holes C & D which had not been included in the original application. Brian Moore testified that the purpose of the comments was made to the designer to make the application technically complete. He testified that the

comment "Very difficult lot" was used to indicate to the designer and the Applicant that we feel the project is a very difficult project (Vol. V pg. 91).

The Applicant had provided responses to the OWR October 30, 2006 comment on March 21, 2006. A meeting was held at OWR on April 3, 2007 attended by representatives of OWR and the designer. OWR issued comments as a result of the submissions by Applicant and the discussions at the meeting. The comments, contained on page 2 of Applicants' Exhibit #11 Full, once again request results for test holes C & D. The comments also request that the Applicants' "provide wet season readings for all existing test pipes on Locus Lot."

In a document dated April 18, 2007 from Applicants' soil evaluator David Kalen, Applicants' Exhibit #10 Full, asserts that the said the evaluator has the option to determine the seasonal highwater table in the wet season. He indicated that he is satisfied by the results of test holes A, B, C and G that the water table is about thirteen (13) inches from the original ground surface. He asserted that since neither the Department nor the evaluator disagree on his determination he has "declined to exercise his option of reading test holes during the wet season".

Applicants' soil evaluator testified that he submitted numerous test hole results. On September 2, 2004 he dug four test pits A, B, C and D. The ESHWT for A & B was thirteen (13) inches for A and twenty-four (24) inches for B. Test hole B was thought to be an anomaly. Test holes C & D were not described in the initial report. On May 25, 2006 Mr. Kalen dug additional test pits identified as E, F and G. Test hole E showed an ESHWT of thirteen (13) inches and test holes F and G showed an ESHWT of six (6) inches. The results of the soil analysis were reported to OWR by means of a "Site Evaluation Form" Applicants' Exhibit #17 Full.

Applicants acknowledge in their brief that the Director has the right to request additional information as he/she deems necessary. They argue that this right cannot be construed so broadly so as to result in absurdities. The question they present is whether the Director's request for wet season test results would result in an absurdity.

Reviewing the facts presented to OWR in the variance application I find that the Director's request for wet season test results was not unreasonable and would not result in an absurdity. The lot is located in a critical resource area and is known to have an exceptionally high water table. The test results from holed G and F showed six (6) inch ESHWT. In addition there was standing water observed in a corner of the subject premises which suggests a water table near the surface. Applicant acknowledges that there were already present on the property test pipes which are normally associated with wet season testing. OWR had the right and the duty to request wet season test results to confirm the questionable ESHWT.

The Applicant testified that he was not aware that there was a problem or question regarding the water table. I find that the Applicants' testimony in their regard is incredible. He was aware of a potential highwater table before he purchased the property. He did not conduct tests prior to purchase. He was evasive on the issue of who installed the wet season test pipes on the premises but eventually testified that it was his father. He said the results indicated twenty-four (24) inch plus water table but never reported that information to his consultants. The Applicant takes the position that all problems can be solved by engineering. His opinion was that by use of the AdvanTex with BSF the system could work effectively with a water table of thirteen (13) inches, six (6) inches or even zero (0) (Vol. IV pg. 57).

There is no evidence that the highwater table is zero (0) but the Applicant's testimony to this effect reveals his state of mind. He felt that he had found a system which would work under any conditions. OWR cannot carry out its statutory obligation to protect public health safety and welfare by accepting Applicant's position that this system would work regardless of the conditions. OWR was entitled to request additional test results. The Applicant was wrong in refusing to conduct additional wet season testing.

The Applicants have not met their burden of proof by clear and convincing evidence that the system will function as proposed and would not be contrary to the public interest, the public health, and the environment. That burden includes providing whatever additional information the

Director deems necessary to adequately assess the impact of the system on the public health and the environment (ISDS Regs SD 2.02(d) and SD 20.00(d).

The Applicants in their brief references *Strach v. Durfee*, 635 A.277 on the issue of “unnecessary hardship”. A reading of that case reveals that the Supreme Court did not establish a meaning of the term “unnecessary hardship” but is helpful in determining of this appeal. *Strach* at page 284 says:

“A variance is given only if it is found that “a literal enforcement of such provisions will result in time unnecessary hardship to the applicant and that such a permit or variance will not be contrary to the public interest and public health.”

“[a] finding that applicant has not met his burden with respect to the issue of public health and public interest is dispositive therefore, it is not necessary for the Hearing Officer to reach a decision if the regulation will result in unnecessary hardship to the applicant.”

I specifically find that the Applicants have not met their burden of proof by clear and convincing evidence due to their failure and refusal to provide the additional information requested by the Director. Without the additional information the Department acted within its statutory and regulatory authority. Having made a determination that the Applicants have failed to meet their burden of proof on the issue of public interest and public health, it is unnecessary to address the issue of “unnecessary hardship”.

## **FINDINGS OF FACT**

After review of all documentary and testimonial evidence of record, I make the following findings of fact:

1. William C. Balcezak and Donna L. Balcezak filed Application No. 0405-1861 on August 10, 2006 requesting the approval for the installation as an ISDS on real estate located in Charleston, Rhode Island on Tax Assessor's Map 2, Lot 411.
2. The application requested variance of Rules SD 15.02 (a)(b) and SD 19.02.5 of the Rules and Regulations Establishing Minimum Standards Relating to Location, Design, Construction and Management of Individual Sewage Disposal Systems (“ISDS Regulations”).
3. The Office of Water Resources denied Application No. 0405-1861 and notified Applicants by letter dated September 20, 2007.
4. The Applicants filed a request for hearing on October 23, 2007.
5. A Prehearing Conference was held on April 18, 2008 and a Prehearing Record and Order was entered on April 30, 2008.
6. The Administrative Hearing was held on October 27, 28, 29 and December 8 and 9 of 2008.
7. All hearings were conducted in accordance with the provisions of the “Administrative Procedures Act” (Chapter 42-35 of the Rhode Island General Laws), the Rules and Regulations Establishing Minimum Standards Relating to Location, Design, Construction and Maintenance of Individual Sewage Disposal Design Systems, and the Administrative Rules of Practice and Procedure for the Administrative Adjudication Division for Environmental Matters.
8. The Applicants proposed to install an individual disposal system to service a two (2) bedroom single-family home.
9. The proposed ISDS requires two (2) variances from the ISDS Regulations.
10. The entire site sits in a floodplain.
11. On September 2, 2004 four (4) test pits were dug by the Applicants' soil evaluator.
12. The soil evaluator reported an ESHWT of thirteen (13) inches for test holes A and B. Test holes C and D were not described.
13. On May 25, 2006 three (3) additional test pits were dug by the Applicants' soil evaluator.
14. The soil evaluator reported an ESHWT of thirteen (13) inches for test hole E and an ESHWT of six (6) inches for test hole F and G.

15. On October 30, 2007 OWR issued nine (9) comments to Applicants in response to their application for variance.
16. One of the comments from OWR asked for test results for test holes C & D.
17. One of the comments from OWR advised "Very difficult lot".
18. On March 21, 2007 Applicants provided to OWR a response to its initial comments.
19. The response of March 21, 2007 did not provide results from test holes C & D.
20. On April 3, 2007 a meeting was held attended by OWR and Applicants' consultants.
21. Following the April 3, 2007 meeting OWR issued additional comments.
22. One of the additional comments requested, again, results from test holes C & D.
23. One of the additional comments requested wet season readings for all existing test pipes on Locus Lot.
24. OWR received a document from Applicants' soil evaluator dated April 18, 2007 advising that he would not be conducting a wet season test.
25. OWR had the authority to request additional information in the form of wet season testing in order to properly evaluate a reliable ESHWT.
26. Applicants did not sustain their burden of proof by clear and convincing evidence that the system as proposed would not be contrary to the public interest and public health.
27. OWR properly denied application for variance No. 0405-1861.

## **CONCLUSIONS OF LAW**

After review of all documentary and testimonial evidence of record, I conclude the following as a matter of law:

1. All hearings were conducted in accordance with Rhode Island General Laws, the ISDS Regulations and the Rules of Practice and Procedure for the Administrative Adjudication Division for Environmental Matters.
2. Applicants have failed to prove by clear and convincing evidence that the proposed system will not be a danger to public health.
3. Applicants have failed to prove by clear and convincing evidence that the waste from the proposed system will not be contrary to the public interest, public health and the environment.
4. The variances which Applicants seek will be contrary to the purposes and policies set forth in the Administrative Findings and Policy of the ISDS Regulations.
5. OWR properly denied Applicants' request for variance.

Entered as an Administrative Order this \_\_\_ day of May, 2009 and herewith recommended to the Director for issuance as a Final Agency Order.

David Kerins

Acting Chief Hearing Officer

Entered as a Final Agency Order this \_\_\_ day of \_\_\_\_\_, 2009.

W. Michael Sullivan, Ph.D.

Director

## **NOTICE OF APPELLATE RIGHTS**

This Final Order constitutes a final order of the Department of Environmental Management pursuant to RI general Laws § 42-35-12. Pursuant to R.I. Gen. Laws § 42-35-15, a final order may be appealed to the Superior Court sitting in and for the County of Providence within thirty (30) days of the mailing date of this decision. Such appeal, if taken, must be completed by filing a petition for review in Superior Court. The filing of the complaint does not itself stay enforcement of this order. The agency may grant, or the reviewing court may order, a stay upon the appropriate terms