

**DECISION OF THE HEARING EXAMINER
CITY OF BAINBRIDGE ISLAND**

In the Matter of the Appeal of

PlasticFieldsforNever.org

BLD14085GAF

From a Mitigated Determination of
Nonsignificance

Introduction

PlasticFieldsforNever.org, by Chris Van Dyk, appealed the Mitigated Determination of Nonsignificance for the proposal by the Bainbridge Island Metropolitan Park and Recreation District to resurface two existing soccer fields with artificial turf at Battle Point Park.

Hearing and Party Representatives: An open record public hearing was held on November 13 and 14, 2008. The applicant was represented by Ryan Vancil, Vancil Law Offices, Appellant PlasticFieldsforNever.org, a citizen appeal by Chris Van Dyk, Appellant/Intervener, Bainbridge Island Youth Soccer Club, by Bart Freedman, Jr., Thomas Backer and, Kenneth Gish, K & L Gates LLP, and the Department of Planning and Community Development by Rod Kaseguma, Inslee Best.

Post-hearing Motions: A Motion to Stay Issuance of Decision on MDNS Appeal was filed by the City of Bainbridge Island to allow consolidation of any appeal of the building permit issuance and the SEPA appeal. The building permit was issued on November 19, 2008, and no appeal of that decision was filed during the 14-day appeal period. The following were then filed: Bainbridge Island Metropolitan Parks and Recreation District's Response; Further Response by Bainbridge Island Youth Soccer Club; Response by Mr. Van Dyk to Motion to Stay; Notice of Appeal of the Building Permit Issuance; Motion to Vacate Building Permit as Prematurely Issued and to Consolidate Ruling with as yet Unissued Ruling on Appeal; Bainbridge Island Metropolitan Parks and Recreation District's Motion to Dismiss Motions Submitted by the City of Bainbridge Island and Appellant Chris Van Dyk; Bainbridge Island Youth Soccer Club's Response to Appellant Chris Van Dyk's Motion to Vacate Building Permit; and City of Bainbridge Island's Motion to Dismiss Chris Van Dyk's Motion to Vacate Building Permit and to Withdraw Motion to Stay.

At the time of the hearing on the appeal of the MDNS, the building permit had not been issued because of a condition of the MDNS requiring further action. In a ruling on the Parks District's Motion for Partial Summary Judgment, the condition was stricken and the building permit issued. No appeal was filed within the 14-day appeal period, presumably rendering moot the issue of the City's initial motion. On December 4, 2008, Mr. Van Dyk included an appeal of

the building permit in his response to the Motion to Stay the Decision, which he e-mailed to the parties and to Diane Sawyer, clerk to the Hearing Examiner. He argued that his appeal, though not within 14 days, was timely because Section 2.16.130 requires a 21-day appeal period, and that the building permit is without force and effect because it was issued prior to resolution of the MDNS appeal and because the application did not satisfy the requirements of Kitsap County regarding protection of the aquifer recharge zone.

Appellant made the same assertions in his Motion to Vacate contending that the building permit was issued prematurely issued without regard for compliance with codes, laws and ordinances, and issued without regard for resolution of his appeal. Appellant requested that the ruling on his motion be consolidated with the ruling on his appeal, after further hearing on the merits of his appeal.

The respondents state, and no evidence was offered to the contrary, that the appeal of the building permit was not filed with the City Clerk and no filing fee was paid within the appeal period. As an administrative officer, a hearing examiner has only the authority delegated to the hearing examiner by the City Council, so the hearing examiner has jurisdiction to review the issuance of a building permit only when an appeal meeting the requirements of Section 2.16.130 is filed. Even if the 21-day appeal period applied in this case so that the appeal was timely, without a showing that the requirements of the section are met, the hearing examiner has no jurisdiction to review the permit. The Motion to Vacate must be denied.

The City has moved to withdraw its motion for a stay of the decision on the appeal if the Motion to Vacate is denied. The request to withdraw the Motion to Stay should be granted.

On December 22, 2008, Appellant filed his Motion to Strike Testimony of Jennifer Sutton, arguing that her testimony at hearing was substantially misleading as to her knowledge of the location of the aquifer recharge zone and require a rehearing. A full hearing with opportunity for cross-examination and argument was held and the record closed. This motion would require reopening the record but without legal grounds for doing so. This motion should be denied.

Code References: All references to sections in this decision are to the Bainbridge Island Municipal Code, unless otherwise indicated.

After due consideration of all the evidence in the record, not including the additional facts provided by appellant in his post-hearing pleadings, the following shall constitute the findings, conclusions, and decision of the Hearing Examiner on this appeal.

Findings

1. Bainbridge Island Metropolitan Parks and Recreation District, hereafter “Parks District”, proposed the renovation of two of the ball fields at Battle Point Park located at 11299 Arrow Point Drive NE with an artificial turf field. The installation of the system requires a building permit, which was applied for on November 28, 2007. Exhibit C14.

2. The City of Bainbridge Island (“City”) issued a Notice of SEPA Mitigated Determination of Nonsignificance (MDNS) for the proposal on June 14, 2008. PlasticFieldsforNever.org filed an appeal of the MDNS. After the issuance of the MDNS, a health advisory resulted in considerable public comment about the safety of artificial field turf. The City considered the public comment and additional information received and then withdrew its prior MDNS and issued a new MDNS on July 7, 2008, with additional conditions. PlasticFieldsforNever.org filed an appeal of the reissued MDNS on August 4, 2008.

3. The new MDNS added conditions that required documentation from an appropriate reviewing agency demonstrating that the project would have no significant adverse impact on water quality (Condition No. 8) and that there be annual water quality monitoring for ten years. Bainbridge Island Youth Soccer Club, hereafter “Soccer Club”, filed a Motion for Partial Summary Judgment as to MDNS Condition No. 8. The motion was considered at the beginning of the hearing and granted.

4. Two of the soccer fields at Battle Point Park have deteriorated to the point that they are not usable during part of the year and are considered a safety hazard. The fields were upgraded in 1983 with sand and tire crumb and have not been renovated since. Pictures of the field show play in standing water. Exhibit 55. The Soccer Club, with more than 1200 players, experiences a shortage of safe fields so the teams have had to travel to other cities for home games. The Soccer Club entered into an agreement with the Parks District to renovate the fields and have raised some \$1.4 million dollars toward the renovation. The Soccer Club researched possible systems, interviewed park, school and maintenance staff and determined that Field Turf best met the need, and had the best construction and maintenance record. The vendor was selected through a non-profit purchasing organization. The Parks District considered natural turf and different artificial turf products and looked at the studies of the Microsoft and Grass Lawn Park fields from King County.

5. The Parks District agreed to have the City make the SEPA threshold determination rather than making the decision itself for greater neutrality and provided the City with comments from the public it had received and information from public meetings. Testimony of Barrett.

6. The Bainbridge Island School District has just completed the installation of Field Turf at the high school. The school district issued a determination of nonsignificance for that installation without any conditions. Exhibit 56.

7. The Field Turf system uses turf made of polyethylene monofilaments fastened to a polypropylene fabric base, filled with a mixture of silica sand and cryogenic rubber “crumb” (recycled tires) at a ratio of approximately 70:30 by weight. Exhibit C88. The particles are 1-2 mm. in diameter, approximately the size of rice grain or smaller.

8. An earlier generation of artificial turf used nylon or nylon blend fibers that contained lead. The polyethylene fibers in the proposed Field Turf do not.

9. Flame retardants will not be used in the turf to be installed at Battle Point fields. Exhibit 61.

10. Installation of the system involves cutting and filling with existing field material to even out the field, creating a network of perforated pipes in rock trenches that collect water and take the water to each side into several nonperforated collection pipes which take the water to a point at the

north end where it is directed to an existing bioswale and then to a detention pond. A six-inch layer of base stone is laid down and covered with two inches of top stone. This is rolled for compaction and then the mat is placed over the base and filled with the sand and tire crumb.

11. The bioswale meets the design requirements to allow water to flow slowly in a relatively flat, shallow area where the grass can filter the water, and sediment matter, including plastic or rubber particles, settle out. The swale extends an estimated 600 feet where the typical swale is around 200 feet long. The current runoff from the fields is fast but the new system will have a peak rate equal to or less than the existing rate with the significant travel time through the levels of material. This should reduce the flow to the west, which has caused problems to property owners in the past. Testimony of Browne.

12. Maintenance of field turf is largely the picking up of leaves and debris, spot cleaning, and grooming with a towed implement twice a year. No pesticides or algacides are needed. Generally, the sand/crumb mixture has not needed to be replaced. The Field Turf's representative knew of only one time in Washington when replacement fill was necessary and that was when it had been vacuumed out. Testimony of Jones.

13. The life of an artificial field is 8-12 years. The sand and rubber can be reused and the carpet disposed of as regular garbage.

14. There are around 3,000 fields with Field Turf in the United States with around 187 in the state of Washington. This year Field Turf will install approximately 750 fields. King County has allowed its installation in a park near a wetland and salmon-bearing stream after requiring special study, and requiring that the fill mixture be at least 30 percent sand.

15. According to the supplier's agent, some 700-750 fields have been tested for lead. One field in San Diego, containing one of the earlier generations of materials, was found to have lead in the fibers. None was found to have lead in the crumb. Testimony of Jones.

16. The City requested consultation with the Kitsap County Health District and the State Departments of Fish and Wildlife, Ecology, and Health regarding possible environmental impacts of the proposal as part of the City's threshold determination process.

17. Eva Crim, an epidemiologist with the Kitsap County Health District, responded to the request for consultation with a review of the literature regarding potential human health and environmental risks. She concluded that there is a general consensus from the scientific literature she reviewed that there is acceptable or minimal risk to human health and the environment from the proposed use of recycled tire crumb. Exhibit C31, p.9.

18. The City reviewed summaries of the scientific literature prepared specifically for the review of this project by Ms. Crim and Dr. Johns. Exhibit C20. There are also summaries of the literature for the San Francisco Department of Recreation and Parks by that City's Department of Public Health. Exhibit 68.

19. Appellant provided the City with critiques of the various studies along with Mr. Van Dyk's comments to the checklist. C59.

20. To support Appellant's contention that there is not a consensus within the scientific community regarding the safety of crumb rubber in turf fields, appellant provided an article, authored by David R. Brown, ScD, from Environment and Human Health, Inc. (EHHI, Exhibit

C62) that identified deficiencies in all original studies considered in the MDNS, and concluded that because there are numerous health concerns and data gaps to be filled, it is prudent to conclude that there will be human exposure to chemicals released during use of the fields. Appellant also provided an EHHI memo (Exhibit 37) with a letter from Philip Landrigan, MD, addressing his concern regarding health problems from extreme heat on summer days and MRSA outbreaks related to skin abrasions, and his concern that chemical hazards of crumb rubber have not been sufficiently studied. That exhibit also contains what appears to be a news article with a synopsis of the Zhang and Crain (2008) article regarding hazardous chemicals and their bioaccessibility in digestive fluids and a research review by Crain and Zhang. They discussed their sampling and analysis of the infill material from four parks in New York City where they found “worrisome” levels of zinc and lead, and then looked at studies of leaching of chemicals from tire materials. Exhibit 39 is a “Fact Sheet: by the Delaware Riverkeeper, summarizing some of the scientific and other literature and providing a comparison of costs between natural and artificial turf. In Exhibit 40, Dr. Brown states in a memorandum to Mr. Van Dyk that there “cannot be a ‘scientific consensus about the safety of artificial turf in the scientific community or anywhere else’” because of the variability in tire content. Nancy Alderman, president of EHHI, attached the Landrigan letter mentioned above, a synopsis of the Zhang and Crain (2008) paper documenting a small scale study to measure the chemicals in turf and their digestibility in synthetic saliva and gastric and intestinal fluids. Chromium and lead showed bioavailability to humans, suggesting a potential health risk. The Crain and Zhang research review was included in the collection, as well as a Wikipedia article and the Norwegian Pollution Control Authority and Norwegian Institute for Air Research article on their measurement of the concentration of airborne dust and gas compounds in indoor air from artificial turf. Exhibit 51 is an editorial in the Journal of Exposure Science and Environmental Epidemiology urging a more thorough understanding of the health risk implications and environmental impacts from the use of synthetic fields. Exhibit 52 is a collection of material posted on the SynTurf.org website, including news items about artificial turf fields, articles, contributions from readers, etc.

21. Several of the studies reviewed by the various reviewers analyzed tire crumb to determine its chemical composition. The classes of chemicals found in tire crumb include metals such as zinc, lead, iron, copper, arsenic and cadmium, phthalates, polyaromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs) and volatile organic compounds (VOCs).

22. For some of the analyses of the chemical composition of tire crumb, the crumb was completely dissolved in strong acids and at high temperatures. See e.g., Crain and Zhang (2007). Exhibit 37. These do not provide information that can be directly applied to environmental issues since the crumb would not completely dissolve in environmental conditions and the analyses do not consider the leaching potential and bioavailability of the chemicals. Testimony of Johns. Others used methods to represent natural conditions to help understand potential exposure to humans and the environment.

23. Plesser and Lund (2004) studied the degree to which chemicals were leached from the crumb and found that only a very low percentage of the total concentration of the chemicals, both metals and organic compounds, leached out except for zinc at 0.01 percent to 0.31 percent. The French study looked at water from precipitation that actually had percolated through a synthetic turf field. Several organic compounds and metals were at detectable levels but lower than drinking water standards. The Presser and Lund study found that almost all compounds in tire crumb were

present in leachate at concentrations less than 1/1000 percent, and zinc, when detected, was below ambient water concentration.

24. The organic compounds found in the EHHI study were generated at high temperatures for some time and two of the four are substances that are heavily used in food preservation and pharmaceuticals. Testimony of Johns. There is no evidence that organic compounds would leach in field use.

RISK TO HUMAN HEALTH

25. The State of California published an evaluation of the risks to young children who ingest tire crumb and used an acidic solution to simulate digestion and then analyzed for chemicals that may have been released by the crumb. OEHHA 2007. The study concluded that for chemicals classified as carcinogens, the risk is considerably below the *de minimis* risk level of one in one million, and for non-carcinogenic chemicals, at or below screening values for a low risk of acute health effects. The report also estimated risks for 49 chemicals reported in other studies and, using the highest published concentrations, concluded that the risks were below health effects levels, except for zinc. The maximum concentration of zinc cited in one report would have exceeded the health-based screening value but the concentrations in all the others reported in the literature would not have resulted in an exceedence. As to exposure by ingestion, the OEHHA found no likely increased risk for children ingesting 10 grams of recycled tire crumb at one time, described as a worst case scenario. The simulation of gastric digestion of leachate from 10 grams of shredded tire also did not represent a serious health hazard, so the reviewers concluded that usual exposure levels are not likely to pose an increased risk. The risk from hand-to-mouth exposure found no risk and uses of an athletic field are likely to have lower exposures than in the playground environment studied. Exposure of rubberized playground surfaces to guinea pigs suggested that the risk of skin sensitization reactions is likely to be minimal.

26. Weintraub and Lee reviewed studies relevant to assessing the potential for health risk at the request of the San Francisco Department of Public Health, including the OEHHA assessment, which they found to be extremely thorough and reliable. Exhibit 68. They found that the conclusions of the OEHHA assessment that the risks associated with rubberized play surfaces are likely to be minimal were supported by other local, state and international government agencies. Exhibit 68.

27. A risk assessment by Moretto (2007) for risks associated with vapor emissions assumed a high level of exposure from practice and playing in an indoor facility and concluded that the volatile organic compound and formaldehyde emissions identified present no cause for concern.

28. Environment and Human Health Inc., a non-profit agency, conducted a review of the literature and laboratory tests regarding the risks of exposure to ground up rubber tires in athletic fields, playgrounds and gardening mulch. It concluded that there are numerous health concerns and cautioned that “the status of the information about human exposures to recycled tire crumb rubber in-fill and gardening mulch is not sufficient to determine the safety of the use of the product in situations that involve continuous episodes of human exposure.” C62, p.15

29. Weintraub and Lee also considered the Environment & Human Health, Inc., report and concluded that it did not assess the value of the information in the studies that suggest risk and

uncertainty with respect to likely exposure scenarios, and the reviewers were concerned about bias in the report. Exhibit 68.

30. A study by the Norwegian Institute of Public Health (2006) investigated the risk to humans from playing on artificial turf indoors and, using worst case scenarios, concluded that playing on artificial turf does not cause any increased health risk from inhalation, skin contact or ingestion of particles.

31. Dr. D. Michael Johns, an aquatic scientist with specialization in the area of natural resource damage assessment, sediment and water quality studies and human health and ecological risk assessment, was asked by the Parks District to evaluate the body of literature regarding synthetic turf fields looking at human health and ecological effects. He found literature showing chemical analyses of the materials without evaluation as to risk, surveys of the literature, and only three papers documenting original research done on human health effects. The three were the OEHHA (2007), Moretto (2007) for the French ALIAPUR and ADEME, and the Norwegian Institute of Public Health (2006). To determine the risk, a study needs to define the contaminants, the exposure in terms of time, length, pathway, and the dose in order to determine if the chemical is going to be toxic at that concentration. While they did this, none of the three studies related to conditions in the northwest. The French and Norwegian studies involved an indoors situation that would constitute a hyper-exposure environment. Testimony of Johns.

32. In order to assess the potential health risks that might be associated with playing on synthetic turf fields on Bainbridge Island and to address deficiencies in the other studies, Dr. Johns constructed an exposure scenario for a child and a teenager. He assumed that the child uses the turf field from age 8 through 10, playing 3 hours per day on 261 days per year. The teenager uses the field from age 11 through 18 playing for 3 hours per day on 261 days per year, a very conservative exposure model. He looked at absorption through the skin from contact, inhalation of volatile organic compounds, and ingestion of the crumb particles. All chemicals identified to date in tire crumb were considered, both carcinogens and non-carcinogens, and at the highest measured concentrations listed in studies by NIPH (2004), Plesser and Lund (2004) and OHHEA (2007).

33. Dr. Johns concluded that cancer risks from dermal exposure and ingestion were several orders of magnitudes below the EPA risk threshold of one in one million, and non-cancer risks were less than 1.0. Risks from inhalation were well below the risk threshold for the child and for the teenager for all chemicals except benzene and carcinogenic PAHs where the risk is at the risk threshold. However, these are overestimated as the teenager would be playing in the open air on Bainbridge Island and the inhalation scenario assumed the concentrations in an enclosed environment, not an open field, and also assumed concentration of a newly installed indoor turf field where it was found by Moretto (2007) that the volatile organic compound concentration released decreased over 70 percent within 28 days after installation. Exhibit C20.

34. A press release by the New Jersey Health and Senior Services Commissioner urged the federal Consumer Product Safety Commission to investigate the safety of artificial turf based on testing by the Department of Health and Senior Services that showed lead levels higher than the state standards. The high lead levels were seen only in artificial turf containing nylon fibers. Exhibit C33.

35. The Centers for Disease Control issued a CDC Health Advisory on June 18, 2008, regarding Potential Exposure to Lead in Artificial Turf. Exhibit C55. The advisory was based on

the New Jersey testing that was limited to nylon or nylon/polyethylene blend fibers and said that tests of turf with only polyethylene fibers showed very low levels of lead. The CDC made recommendations for testing turf fields that are worn or weathered, among other recommendations.

36. Surface, and subsurface, temperatures of synthetic turf can be significantly higher than natural turf. In eastern United States, very high temperatures have been reported but there is less concern about the “heat island” effect in the Pacific Northwest because of the more moderate climate.

37. The EPA recognizes one in one million as the risk threshold and anything below is risk free or an acceptable risk. Testimony of Dr. Johns.

ENVIRONMENTAL EFFECTS

38. Dr. Johns and Tom Goodlin, a hydrogeologist specializing in the evaluation of groundwater contaminant fate and transport, reviewed the available scientific literature and publications to provide an assessment of the potential risks to the environment that may result from runoff from the synthetic turf fields, both collected storm water and water that migrates through the soils to the groundwater. Exhibit C32. Dr. Johns observed that the studies surveyed represented a random selection of tire crumb variety that would be statistically valid. Leachate tests showed the crumb has the potential to release some chemicals but the concentration of chemicals released was much lower than the concentration in the crumb itself in all cases. Plesser and Lund found that only a very low percentage of the concentrations leached out, except for zinc. Moretto (2007) actually collected water after rainwater percolated through the turf for 11 months, starting just after installation. The study showed that the very low concentrations dropped over the testing period. Zinc remained steady but the concentrations were no higher than the concentrations in the rainwater. Tests of storm water from newly installed synthetic turf fields in King County at the request of King County for zinc and copper either did not detect the metals at all or detected them in concentrations considerably below EPA or Washington Department of Ecology water quality standards.

39. While the majority of rainwater that infiltrates the field will be collected in the drainage system, some may bypass the system and enter the ground water. The sedimentary strata under Battle Point Park have been identified as sand, gravel, silt, and peat of the Pre-Vashon deposits. A U.S. Geological Survey evaluation describes the aquifer under the park as stratified sand and gravel with good water quality and dissolved constituents that indicate aerobic conditions.

40. Mr. Goodlin concluded that there would be no adverse impact on the aquifer because zinc and copper are immobile in the environment present at the fields. The soil conditions include hydroxides in solid form so any dissolved metals that are leached and are not collected by the storm water system would be sorbed by the hydroxides and would not reach the aquifer. Sorption would occur with other metals also, such as lead. Testimony of Goodlin.

41. King County required water quality testing of newly installed synthetic turf fields for zinc, copper, hardness, pH, and toxicity to determine whether stormwater from the fields was toxic to bio-assay organisms for projects in Redmond at Grass Lawn Park and at the Microsoft campus. No toxicity was detected to the test organisms. Exhibit C7.

42. Whether the chemical concentrations identified in run off would be toxic to aquatic organisms was evaluated in several published studies as well. The studies using collected storm water runoff reported no toxicity to aquatic species, except for one sample that inhibited algal growth. In one study, undiluted leachate derived from soaking the crumb in water did result in toxicity but showed no toxicity in a more standardized test to determine if the toxicity would persist over time. California surveyed the literature as to using recycled waste tires on playgrounds. It found that tire crumb applications did not result in leaching of high enough concentrations to cause toxic effects.
43. A wellhead supplying public drinking water is located in Battle Point Park. The well is 910 ft. deep. The state health department requires annual testing for nitrates, SOC, lead and copper.
44. At Battle Point Park, the point of discharge to the pond that leads to the creek is some 600 ft. from the fields and in that time the runoff would pass through the grassy swale and a soil matrix that would pick up most of the chemicals that do leach into the stormwater.
45. The Parks District does not intend to lock the fields or post warning signage. Testimony of Bartlett.
46. Notice of the SEPA threshold determination was posted at City Hall, the Bainbridge Island Chamber of Commerce and the ferry terminal. It was mailed to required agencies, to everyone on the Park District comment list, and to all properties within 300 ft. of the park.
47. The State of Washington issues National Pollutant Discharge Elimination Systems (NPDES) permits, not the City. The City advised the applicant that they would need to obtain a permit.
48. The Hearing Examiner is authorized by Section 16.04.170 to hear and decide appeals of SEPA determinations.

Conclusions

1. The Hearing Examiner has jurisdiction to hear and decide this matter.
2. The SEPA threshold determination made by the City's responsible official in this case, an MDNS, is to be given substantial weight on review. Section 16.04.170(E). The MDNS is reviewed under the clearly erroneous standard, *Norway Hill Preservation and Protection Assn. v. King County Council*, 87 wn.2d 267, 275, 552 P.2d 674 (1976), so the MDNS must be affirmed unless the hearing examiner is "left with a definite and firm conviction that a mistake has been committed." The record must show that "environmental factors were considered in a manner sufficient to amount to prima facie compliance with the procedural requirements of SEPA" and that the determination was based on information sufficient to evaluate the environmental impact of the proposal. *Moss v. City of Bellingham*, 109 Wn.App. 6, 23 (2001). The burden of proving that the determination does not satisfy the procedural standards of SEPA and to prove that there will be a probable significant adverse impact from the proposal, defined as a reasonable likelihood of more than a moderate adverse impact on environmental quality, WAC 197-11-794, is on the appellant. Each of appellant's grounds for appeal will be examined under these standards.

3. Appellant claimed that the City failed to notify nearby property owners and users of the park of the application for the proposal's approval and the MDNS. No facts were adduced showing that the City failed to give the notice required by SEPA and the City's code.
4. Appellant cited the failure of the City to require an individual NPDES permit, but those permits under the Clean Water Act are issued by the State of Washington, not the City.
5. Appellant alleged that the Parks District has failed to provide the full public record created over the time of consideration of the project to the City, constituting a violation of due process owed to the commenting persons and organizations. The findings show that the Parks District did forward written comments and the records of the public meetings. No evidence appears in the record that information was not forwarded nor was there a showing that there is a legal requirement to do so.
6. Appellant contended that the City failed to require a hazardous waste disposal plan for the artificial turf at the end of its useful life. As the findings show, the turf would not constitute hazardous waste. When the field is to be removed, a grading permit will be required and any conditions regarding disposal of debris will be considered at that time.
7. Appellant claimed error in the failure of the MDNS to require measures to protect against migration of tire crumb into water bodies. The record shows that the crumb would have to pass through the mat, sand and other base materials and then, should it be carried further by water, it would settle out in the 600 ft. bioswale and never reach the detention ponds which intervene between the bioswale and the stream or Puget Sound.
8. The remaining grounds for appeal are: a) the condition for monitoring for toxicity is insufficient mitigation; b) the baseline for measurement of toxins should be before crumb rubber particulate was first introduced at the site; c) failure to consider relevant and best available science, e.g., the CDC advisory about lead in turf made of nylon or nylon/polyethylene blend fibers; d) failure to address possible airborne transmission of lead dust; e) failure to consider heat hazards to human health; and f) failure to require an adequate monitoring plan. The evidence in the record responds to these specific allegations and the more general contention that there is insufficient information on which to base an MDNS.
9. The record shows that the planner who made the recommendation to the responsible official to issue an MDNS had reviewed the comments, had sought consultation from agencies with expertise and received a report summarizing the scientific literature from one, and had reviewed some of the studies herself plus the CDC advisory, the Brown article provided by Appellant, the work by Dr. Johns and Mr. Goodlin commissioned by the Parks District, among other documents. This demonstrates *prima facie* compliance and that she was fully advised of information available and the state of the science.
10. As the findings show, there is very little concern about risk to human health or the environment chemicals from the polyethylene fibers that are now used. In fact, the findings show that the CDC advisory addressed a different generation of synthetic fibers and ones that are not proposed for Battle Point fields. The studies do show myriad chemicals in tire crumb. The studies that actually assessed the likelihood of risk to human health from different routes of exposure of the chemicals in the crumb concluded that concentrations would be so low that the risk is nonexistent or acceptable. The studies and local tests show minimal concentrations of chemicals

from the tire crumb leaching into the runoff or ground water. The study of toxicity on aquatic organisms showed little effect. The EHHI paper that points out weaknesses in individual studies overlooks the larger body of scientific work that does address some of those problems. It encouraged further study, especially of the longer term effects but would not have taken into account the work done by Dr. Johns in modeling exposure from regular and long term play on synthetic fields that still showed minimal risk of health effects.

11. The record did show greatly elevated temperatures or heat islands occurring during summer months in the eastern U.S. Though temperatures in the northwest are generally lower, there could be times when the turf is hot. The possibility of elevated temperatures alone is not sufficient to convince the hearing examiner that the heat island effect would likely amount to more than a moderate adverse affect on human health and that the threshold determination was clearly erroneous.

12. The evidence adduced by Appellant does not convince the hearing examiner that the issuance of the MDNS was in error because the decision maker lacked scientific information or that the best science shows unacceptable risk to human health or that the proposal is likely to have more than a moderate adverse affect on the environment.

13. Without a showing of a significant adverse environmental impact, the absence of suggested mitigating measures such as conditions requiring signage or additional monitoring is not error.

14. The decision to issue an MDNS should be affirmed.

Decision

The Mitigated Determination of Nonsignificance is affirmed, Appellant's Motion to Vacate Building Permit is denied, City's Motion to Withdraw Motion to Stay the Decision is granted, and Appellant's Motion to Strike Testimony is denied.

Entered this 23rd day of December 2008.

/s/ Margaret Klockars

Margaret Klockars
City of Bainbridge Island
Hearing Examiner *pro tem*

Concerning Further Review

NOTE: It is the responsibility of a person seeking review of a Hearing Examiner decision to consult applicable Code sections and other appropriate sources, including State law, to determine his/her rights and responsibilities relative to appeal.

The decision of the Hearing Examiner is the final decision of the City in this matter. A person with standing may make appeal of this decision to the Kitsap County Superior Court. To be timely, a petition for review must be filed within the 21-day appeal period [see RCW Ch. 36.70].