SYNTHETIC PLAYFIELDS TASK FORCE
MEETING NOTES FROM MAY 29, 2008

Meeting Time: 6 p.m. to 8 p.m.
Location: 1155 Market Street, 4th Floor Conference Room
Facilitator: Claire Lachance
RPD Commission: David Lee
RPD Staff: Yomi Agunbiade, General Manager; Dan Mauer, Capital Projects Division; Dawn Kamalanathan, Planning Director

I. Introductions

Welcome to the meeting by Claire Lachance. Introductions of task force members – names and affiliations.

Dawn Kamalanathan re-emphasized the points in her May 22, 2008 e-mail to the task force members:

- The task force’s job is to gather and evaluate the most current information available regarding the health and environmental concerns of synthetic turf.
- The charter of the meeting is not to evaluate the broader advantages and disadvantages of synthetic turf versus natural grass.
- As Task Force Member Weintraub pointed out at our first meeting, there will be instances where the research requires a direct comparison with grass.
- To the extent that a certain issue requires us to look at natural grass to make the information about synthetic turf meaningful, we will do so.
- But only in the context of our charter, which is to evaluate the health and environmental concerns of synthetic turf and provide the Recreation and Park Commission with good information.
- The Commission has already discussed and compared the merits of grass and synthetic turf in 2004. The Commission decided that given the overwhelming demand for fields, and the relatively small proportion of overall park acreage synthetic fields would occupy, synthetic turf has a legitimate and useful role to play in the recreation system in San Francisco. Since then, concerns about synthetic playfields have been raised, and this has resulted in the need for this taskforce.
• Therefore, our charge is to weigh the legitimacy and relevance of public health concerns with synthetic playfields through gathering and deliberating currently available information. The task force will report its findings to the Recreation and Park Commission.

• Requests members and public to send links and pdf’s to Dawn. Identify who is submitting materials, and materials will be posted on Rec and Park’s Web site. Dawn will assign the materials to the appropriate study group, and the group will decide its relevance to the taskforce deliberations.

II. Presentation of Task Force Research on Assigned Topics

Heat Island Effect – Paul Ledesma, San Francisco Department of the Environment and Chloe Good, Neighborhood Parks Council:

• The bulk of materials contain additives (chemical compositions) which may or may not be of concern.
• The one good study that they have identified is by the Athena Institute. The Athena Institute study was therefore reviewed along with backup information and the conclusion arrived at is that there are climate changes and heat island affects related to synthetic turf, but we have no data to quantify the extent of the effect.
• Solution should therefore be to minimize the use of synthetic turf to only where its benefits could be viewed as favorable over natural turf.
• The urban heat island effect is more of a problem in New York than it is in San Francisco.
• It is not a real problem in San Francisco’s climate and microclimates, however, the synthetic turf may be better suited for South Sunset vs. Potrero Hill due to temperature differences. Therefore, each microclimate in the City would have its own heat island effect and is something to look at.
• The Athena Study did not take into account certain behaviors i.e. grass is mowed so it mitigates some reforestation.

Questions/Statements from the Task Force:

• What about the relative magnitude of the problem? Are there any comparisons to pavement and concrete throughout the City?
• Air and surface temperatures are measurable. Differences between turf and air could be as high as 37 degrees.
• Are there thresholds of size of field to effect temperature? What about the distance away from the field?
• Is user health affected by heat? If so, at what temperatures?
• We need to know more about this and whether or not this is even relevant to San Francisco.
• Watering the fields can lower the temperatures for short duration (Penn State study)
• New York mitigated the situation by planting trees.
• Heat can be significantly higher than on grass – 10 degrees different.
• At what temperature and in what San Francisco microclimates is it relevant?
• What about the sources for the data? The study is not peer reviewed.
• Jeanne Darrah says in the Mission it is never too hot. Look at Garfield, which is a small field in a warm place (vs. a large field in a warm place). It has a lot of trees, but all this is just no big deal in San Francisco.
• Michael Vestel recommends putting in trees for shade and cooling.

Recommendation:

• Consider this information on a case-by-case basis.

Staph Infections – Richard Lee, San Francisco Department of Public Health and Bruce Cohen:

• The Department of Public Health asked one of their doctors to weigh in and they said it’s not a problem on synthetic turf or grass. People get it from skin-to-skin contact.
• Research discovered did not return any environmental studies that looked at the bacterial colonization of synthetic fields, but lots on soil and grass. Unknown if MRSA would grow more or less than on natural grass.
• They searched for information about outbreaks related to artificial turf and found none.
• Therefore, because of the above points, they see no reason to overturn the finding that artificial turf poses no special risk in terms of transmitting bacteria or fungus.
• Discussion of turf burns (see paper submitted) and conclusion that there is no reason to believe there would be more skin abrasions on artificial turf.
• Discussion of disinfectant capacity of outdoor UV rays vs. indoor studies.
• The Recreation and Park Department can take this concern into account as part of its maintenance policy.
• It is prudent to take into account maintenance-like disinfectants on occasion, but in general this is not a public health issue.
• The point of differentiation in the New England Journal of Medicine study was that it was done on an indoor football field. Sunlight is a disinfectant.
• Discussion of need for further study of cleaning and disinfecting – what are the options?
Questions/Statements from the Task Force:

- If studies aren’t available, say that.
- Is there a correlation between synthetic turf and staph?
  - None proven

Follow-up:

- David Weiss will submit New England Journal of Medicine information – related to the lack of “good” bacteria in artificial turf that eats staph bacteria
- Further study of options for cleaning/disinfecting versus maintaining.

Recommendation:

- The Department of Public Health recommends proper wound care.

Recycling - Paul Ledesma, San Francisco Department of the Environment:

- Met directly with manufacturers to question them about their recycling policies.
- Two issues arose:
  1. Amount of post-consumer content in the product – Generally, the city tries to have greater amounts of post-consumer content in the products it purchases.
  2. End of life issues
- Post-consumer content:
  - The highest amount of post consumer content is in the crumb rubber products – 100%.
  - Mondo is the only manufacturer in market who claims any level of post-consumer content (30% in infill products). A standout with a significant presence in Europe.
  - All synthetic turf is made of polyethylene which is easily recaptured. In his opinion, there is not enough post-consumer content in all of the synthetic turf products. These post-consumer content materials are readily available. This would seem to be great market for using it, yet nobody is really doing it.
  - Reusing tires is a beneficial use for an otherwise unusable health menace.
  - Discussion of leaching of toxics in post-consumer content.
- End-of-life: Is synthetic turf a significant solid waste concern for the city in the future?
o No manufacturer has recycling program for product. Some have more commitment than others towards the concept of recycling and using post-consumer waste.
o These fields produce a significant amount of waste: 80,000 square feet (equal to 400 tons of waste).
o SF pays $120 per ton to landfill waste, making alternatives cost effective and also driving our aggressive recycling goals.
o Fields produce significant amount of waste – Spoke with someone from City of Larchmont, which disposed of field and produced 400 tons of waste ($48,000 would be cost to CCSF).
o This material can reasonably be assumed to be capable of recycling, but technology doesn’t exist today. It is likely that such technology will be in place within 5 years.
o Turf manufacturers are investing in recovering the material.
o Europe is further along with recycling and disposal than the U.S. Europe has the technology.
o Paul believes that by the time our products reach end-of-life, the companies will have programs. Mondo demonstrates a high-level of commitment to deal with end of life issues.
o Doesn’t know much about the commitments of the companies currently used by the City (Field Turf and Sportexe). Spoke with Field Turf and they acknowledged they are “behind the 8 ball on this”), Paul doesn’t know anything about Sportexe.

Follow-up:

• Investigate the recyclability of the materials in the Sportexe product.
• Investigate studies on rubber and tire diversion and landfills.

Ingestion/Inhalation - Charles Vidair – Office of Environmental Health Hazard Assessment and Michael Vestel:

• See Charles Vidair’s handout for detailed information on his presentation covering: Relevant Research, Main Findings, Significance for San Francisco, Next Steps.
• VOC’s are not in the air and are not bio-available, but are available on surfaces.
• Elevated levels are near pollution levels and caused by the crumb rubber on a continuous basis.
• Discussion of crumb size and how this impacts health affects.
• Michael Vestel is concerned about where the particles are being generated. Is it in the manufacturing process (there is a cyrogenetic/freezing process as well as one other).
Questions/Statements from the Task Force:

- Is the risk different for smaller crumb rubber than for larger crumb rubber?
- Does the January 2007 OEHHA study need to be repeated using smaller particulate crumb rubber v. the larger crumb rubber that was used in the original study?

Follow-Up:

- Investigate the composition and quantity of actual particulate matter released.

Water Concerns – Assigned to Ellen Levin.

III. Public Comment

Leah Grant:

Called San Francisco recycling centers and discovered that there is no recycling plan for carpet and no more landfills available. She also learned about the City’s ordinance. Because of this, she proposes a moratorium on building new fields until the issue is resolved.

Kelly Watts:

Has samples of the playfields’ crumb rubber fresh – not ever played on. The crumb rubber used is of two sizes. He also has a 7-year-old sample of crumb rubber which shows how brittle and hard/crumbly it becomes. A California bill is currently being moved through the state senate to prepare a study for maintenance. There are three opposing parties: Field Turf, BAF and Environmental Molding. Francisco Heights is in support of this bill.

Edward Percheck:

Lives near Silver Terrace. During the last warm spell, no one was out on the field because it was too warm. Many people were at Golden Gate Park. Asks us to think about paying for this to be removed and re-done every 8 to 12 years. Suggests we read “Cradle to Cradle” – we don’t want to recycle harmful things. It’s sad to take away natural environments. He is an architect and finds it is hard to separate these materials in order to recycle. Doesn’t want to re-use harmful chemicals.

Unidentified Female:
Made statement about not adding to global warming through using synthetic turf.

**Unidentified Male:**

One thing about the tires is that they are still going to be harmful even if we don’t re-use them. Suggests that indoor vs. outdoors studies and should not be considered.