



Operations & Environment Committee

Committee Meeting

2117 West River Road N
Minneapolis, MN 55411
www.minneapolisparcs.org

April 12, 2017

~ Agenda ~

Wednesday 5:10 PM

Meeting Times are subject to change based on discussion from previous meetings.

I. CALL TO ORDER

Liz Wielinski	Chair, Commissioner District 1
Scott Vreeland	Vice Chair, Commissioner District 3
John Erwin	Commissioner At Large
Steffanie Musich	Commissioner District 5
Annie Young	Commissioner At Large

II. APPROVAL OF AGENDA

III. APPROVAL OF MINUTES

Wednesday, February 01, 2017

IV. ACTION ITEMS

4.1 That the Board adopt Resolution 2017-171 captioned as follows:

Resolution 2017-171

Resolution Committing Minneapolis Park and Recreation Board to Several Actions Related to Waste Tire Products, Including Consideration of Alternative Materials in New and Rehabilitated Synthetic Turf Fields; Reporting to the Health, Environment, and Community Engagement Committee of the City of Minneapolis During Athletic Field Project Scoping; Researching Alternatives to Poured-In-Place Playground Surfacing; and Installation of Signs at Synthetic Turf Athletic Fields

V. STUDY/REPORT ITEMS

5.1 Minnesota Department of Agriculture Update on Gypsy Moth Find in Richfield, MN

VI. ADJOURNMENT



Operations & Environment Committee

Committee Meeting

2117 West River Road N
Minneapolis, MN 55411
www.minneapolisparks.org

February 1, 2017

~ Minutes ~

Wednesday 5:50 PM

I. CALL TO ORDER

The time being 6:43 PM, Chair, Commissioner District 1 Liz Wielinski called the meeting to order.

Chair, Commissioner District 1 Liz Wielinski: Present, Vice Chair, Commissioner District 3 Scott Vreeland: Present, Commissioner At Large John Erwin: Absent, Commissioner District 5 Steffanie Musich: Present, Commissioner At Large Annie Young: Present.

II. APPROVAL OF AGENDA

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	Scott Vreeland, Vice Chair, Commissioner District 3
AYES:	Liz Wielinski, Scott Vreeland, Steffanie Musich, Annie Young
ABSENT:	John Erwin

III. APPROVAL OF MINUTES

Operations & Environment Committee - Committee Meeting - Dec 21, 2016 5:20 PM

RESULT:	ACCEPTED [UNANIMOUS]
MOVER:	Scott Vreeland, Vice Chair, Commissioner District 3
AYES:	Liz Wielinski, Scott Vreeland, Steffanie Musich, Annie Young
ABSENT:	John Erwin

IV. ACTION ITEMS

4.1 That the Board adopt Resolution 2017-127 captioned as follows:

Resolution 2017-127

Resolution Approving Minneapolis Park and Recreation Board Comments in Response to the St. Anthony Falls Aesthetic Flow Survey, Prepared for Xcel Energy by Barr Engineering Company, Dated December 2016, Pursuant to United States of America 113 FERC ¶62,215 Order Modifying and Approving Aesthetic Flow Adequacy Plan Pursuant to Article 403 and Directing Staff to Submit a

Minutes Acceptance: Minutes of Feb 1, 2017 5:50 PM (APPROVAL OF MINUTES)

Comment Letter to Xcel Energy – Hydro License Compliance Consultant
Resolution

RESULT: ADOPTED [UNANIMOUS]
MOVER: Scott Vreeland, Vice Chair, Commissioner District 3
AYES: Liz Wielinski, Scott Vreeland, Steffanie Musich, Annie Young
ABSENT: John Erwin

V. STUDY/REPORT ITEMS

5.1 Minneapolis Park and Recreation Board Safety Audit

VI. ADJOURNMENT

RESULT: ADOPTED [UNANIMOUS]
MOVER: Annie Young, Commissioner At Large
AYES: Liz Wielinski, Scott Vreeland, Steffanie Musich, Annie Young
ABSENT: John Erwin

Committee Meeting adjourned at 7:59 PM

Minutes Acceptance: Minutes of Feb 1, 2017 5:50 PM (APPROVAL OF MINUTES)



Resolution 2017-171

Resolution Committing Minneapolis Park and Recreation Board to Several Actions Related to Waste Tire Products, Including Consideration of Alternative Materials in New and Rehabilitated Synthetic Turf Fields; Reporting to the Health, Environment, and Community Engagement Committee of the City of Minneapolis During Athletic Field Project Scoping; Researching Alternatives to Poured-In-Place Playground Surfacing; and Installation of Signs at Synthetic Turf Athletic Fields

Whereas, The Minneapolis Park and Recreation Board (MPRB) was created by the Minnesota Legislature in April 1883 and has the authority to manage and operate park facilities;

Whereas, The MPRB currently owns and operates eight synthetic turf athletic fields that contain waste tire crumb rubber, and numerous playgrounds that utilize poured-in-place surfacing that may be derived from waste tires;

Whereas, Ongoing studies by the Environmental Protection Agency (EPA) and the State of California are considering the effects of exposure to waste tires, though currently there is no clear science that waste tire products are linked to health issues;

Whereas, The Minneapolis community has expressed concerns about waste tires used in recreational facilities, while also recognizing the importance of synthetic turf fields as a means of increasing playing time and facility quality in the city;

Whereas, On June 20, 2016, the City of Minneapolis called for the establishment of a community-led waste tire subcommittee, in which MPRB participated, and which presented recommendations to the City's Health, Environment, and Community Engagement (HECE) Committee on February 27, 2017;

Whereas, A City Council resolution was brought forward also on February 27, 2017, was considered by the City Council on March 20, 2017, and was returned to HECE for further consideration;

Whereas, The MPRB and City of Minneapolis recognize some action must be taken in the short term to address community concerns, without compromising the existing of critical recreational infrastructure, and within compliance with the 20-Year Neighborhood Park Plan Concurrent Ordinances jointly adopted by MPRB and the City;

Whereas, Above all, MPRB is committed to providing safe, high-quality recreation experiences for Minneapolis residents; and



Whereas, This resolution is supported by the MPRB 2007-2020 Comprehensive Plan, which envisions “Dynamic parks that shape city character and meet diverse community needs” and “Recreation that inspires personal growth, healthy lifestyles, and a sense of community;”

RESOLVED, That the Board of Commissioners direct staff to consider alternative materials to crumb rubber when implementing any new or rehabilitated synthetic turf athletic field;

RESOLVED, That the Minneapolis Park and Recreation Board staff shall report to the Health, Environment, and Community Engagement Committee of the City of Minneapolis and to the Minneapolis Park and Recreation Board, Board of Commissioners during the project scoping phase of any new or rehabilitated synthetic turf athletic field project

RESOLVED, That the Minneapolis Park and Recreation Board commits to researching alternative products to waste-tire-based poured-in-place playground surfacing, in order to consider whether alternative products are warranted in terms of availability, cost, and safety;

RESOLVED, That the Minneapolis Park and Recreation Board shall install signs at each of its synthetic turf athletic fields, with those signs being in line with recommendations from the Minnesota Department of Health with the additional recommendation to be aware of potentially elevated field temperatures and consume water regularly while recreating; and

RESOLVED, That the President of the Board and Secretary to the Board are authorized to take all necessary administrative actions to implement this resolution.



TO: Operations & Environment Committee

FROM: Michael Schroeder,

DATE: April 12, 2017

SUBJECT: Resolution Committing Minneapolis Park and Recreation Board to Several Actions Related to Waste Tire Products, Including Consideration of Alternative Materials in New and Rehabilitated Synthetic Turf Fields; Reporting to the Health, Environment, and Community Engagement Committee of the City of Minneapolis During Athletic Field Project Scoping; Researching Alternatives to Poured-In-Place Playground Surfacing; and Installation of Signs at Synthetic Turf Athletic Fields

BACKGROUND

This action considers committing the Minneapolis Park and Recreation Board (MPRB) to several actions related to recreational products derived from waste tires. MPRB operates eight synthetic turf athletic fields, all of which use crumb rubber infill derived from waste tires. In addition, some portions of the poured-in-place rubber surfacing used to create accessible routes within playgrounds is also waste-tire derived. MPRB does not operate any playgrounds with waste-tire rubber mulch.

The Minneapolis community has raised concerns about waste tire products, citing potential health effects, ground water contamination, and issues with elevated temperatures. The community also recognizes the importance these athletic fields play in providing more recreational opportunities in dense urban areas. Synthetic turf fields can extend the season of play, can expand the weather conditions under which fields are safe and useable, and can provide consistent field quality. The eight crumb rubber synthetic turf fields operated by MPRB are Rod Carew Field (on Marshall Street in NE Minneapolis), Farview Park, North Commons Park, Parade Stadium, Currie Park, Elliot Park, East Phillips Park, and Stewart Park.

Recent MPRB planning efforts—particularly the South Service Area Master Plan—saw robust community discussions around synthetic fields. Ultimately the community recommended, and the Board approved, expansion of the number and size of fields in several parks, to better meet the recreational need—with the caveat that these fields should be safe and healthy for human use. Driven by community concern, two major studies are underway that will examine health impacts of waste tire materials: one by the Environmental Protection Agency and one by the State of California. The latter—expected to be the more comprehensive of the two—is due to be complete in 2019.



In response to community concerns, on June 20, 2016, the Minneapolis City Council established a waste tire subcommittee to examine the issue. This community-led group was comprised of members of two standing city advisory committees, with representatives from the MPRB and Minneapolis Public Schools. The committee put forward recommendations (Attachment A) to the City's Health, Environment, and Community Engagement Committee (HECE) on February 27, 2017. On that same date, HECE considered a resolution on the matter. The resolution was opposed by MPRB because it would directly impact several planned projects and was not consistent with the 20-Year Neighborhood Park Plan Concurrent Ordinances, jointly adopted by the MPRB and the City of Minneapolis. The resolution was considered by the City Council on March 10, 2017, and referred back to HECE for further consideration.

The Minnesota Department of Health (MDH) makes the following statement on crumb rubber athletic fields:

Given the extensive use of synthetic turf in Minnesota and the lack of reported health issues associated with their use, it is unlikely that they pose a significant, acute public health concern. However, more information is needed to assess possible long-term issues. [MPRB] will continue to gather information and track ongoing studies to assess possible health risks. In the meantime, users can take some simple precautions such as:

- *Washing with soap and water after use, especially any scrapes and cuts*
- *Shaking out clothes/shoes to limit take home of rubber crumbs*
- *Cover food/beverages to prevent contamination with rubber material*

MDH also suggests placing signs containing that general information at synthetic turf fields.

MPRB recognizes that something must be done in the short term to address community concerns and ensure that residents and visitors can recreate safely and with confidence on Minneapolis's synthetic turf fields. Though MPRB believes it would be premature to ban the crumb rubber product at this time, the agency can take steps now to inform the public about the concerns and explore the cost, maintenance, and use implications of alternative products.

RECOMMENDATION

Staff recommends that the Board of Commissioners commit to several actions related to waste tire products used in MPRB facilities:

- Consideration of alternative materials to crumb rubber when implementing any new or rehabilitated synthetic turf athletic field;
- A report to the Health, Environment, and Community Engagement Committee of the City of Minneapolis and to the MPRB Board of Commissioners during the project scoping phase of any new or rehabilitated synthetic turf athletic field project;



- Commitment to researching alternative products to waste-tire-based poured-in-place playground surfacing, in order to consider whether alternative products are warranted in terms of availability, cost, and safety; and
- Installation of signs at each of its synthetic turf athletic fields, with those signs being in line with recommendations from the Minnesota Department of Health and the additional recommendation for users to be aware of potentially elevated temperatures and consume water regularly while recreating.

This action is supported by the following vision and goal statements in the MPRB 2007-2020 Comprehensive Plan:

Vision Theme 3: Dynamic parks shape city character and meet diverse community needs.
 Goal: Park facility renewal and development respects history and focuses on sustainability, accessibility, flexibility, and beauty.

Vision Theme 3: Recreation that inspires personal growth, healthy lifestyles, and a sense of community.
 Goal: Residents, visitors, and workers enjoy opportunities to improve health and fitness.

ATTACHMENTS:

- 2016 12-05 Crumb Rubber Recommendations-final (PDF)

Prepared By: Adam Arvidson, Manager of Public Engagement & Citywide Planning, Strategic Planning

Review:

Cindy Anderson	Completed	04/06/2017 10:11 AM
Adam Arvidson	Completed	04/06/2017 9:44 AM
Michael Schroeder	Completed	04/06/2017 10:10 AM
Jayne Miller	Completed	04/06/2017 10:10 AM
Operations & Environment Committee	Pending	04/12/2017 5:10 PM
Minneapolis Park and Recreation Board	Pending	04/19/2017 5:00 PM

Memorandum *DRAFT

To: City Council Health Environment Community Engagement Committee

From: PHAC/CEAC

Date: December 12, 2016

Subject: Recycled tires as ground cover Recommendations

This memo is in response to City Council Health Environment and Community Engagement June 20, 2016 direction:

- Requesting that the Public Health Advisory Committee (PHAC) and the Community Environmental Advisory Commission (CEAC) study and make recommendations regarding the use of waste tires as ground cover in Minneapolis and report back to the Health, Environment and Community Engagement Committee in February of 2017.
- Directing staff from the Health Department and City Coordinator's Office of Sustainability to work with the Public Health Advisory Committee and the Community Environmental Advisory Commission to support their efforts to study and make recommendations regarding the use of waste tires as ground cover in Minneapolis.

Appreciation of the Problem

Outdoor playgrounds, sports and athletic fields are critical assets to promote physical activity. The choice of surface materials can affect the safety, usability, and cost of maintaining the play area. Additional factors to consider when making decisions about surfacing materials include: length of season, concentration of use, increasing play time, durability, minimum required depths, fall height, initial installation and ongoing costs, maintenance, and replacement. It is important to note that all surfacing materials have benefits and challenges when taking into account the multiple factors for determining the best product for use in particular situations.

Awareness of crumb rubber and rubber tire mulch as a potential health and environmental issue was brought to the forefront by parental concern for the health of their children.

The Minneapolis Public Schools (MPS) and the Minneapolis Park and Recreation Board (MPRB) put safety of Minneapolis children at the top of their priorities when considering playground and park / field development, usability, cost, and maintenance. Each follows guidelines set forth by the U.S. Consumer Product Safety Commission.

Sports and athletic fields most often consist of natural turf or artificial turf, which may include some type of infill material.

Options available for surfacing around children's play areas and under playground equipment include loose fill materials and unitary surfacing materials.

- 1) Examples of loose fill materials: organic infill composed of coconut fiber, cork and rice husk blend; wood products such as engineered wood fiber, pea gravel, sand, shredded/recycled rubber mulch, wood mulch (not CCA treated*) and traditional wood chips. *CCA = chromated copper arsenate

- 2) Examples of unitary surfacing materials include: “poured-in-place” rubber surfacing or any combination of energy-absorbing materials held in place by a binding agent and cured to create a unitary shock absorbing surface.

Product Definitions

Crumb rubber is granulated rubber made from recycled tires to form small, uniform pellets. Tires are broken up by grinding or freezing; steel and other fibers are almost entirely removed in the manufacturing process. One common use for crumb rubber is as filler in synthetic turf fields.

Tire mulch is shredded rubber made from recycled tires and is similar in size to traditional wood chips. One common use for tire mulch is as surface covering around children’s play areas and under playground equipment.

Organic infill is composed of plant-derived materials, often made of coconut fiber, cork and rice husk blend that is recyclable, organic, claims to be chemical free, and may require more frequent maintenance (to be “topped off”) as the infill decomposes.

Engineered wood fiber (EWF) made from 100% virgin wood fiber which is not chemically treated. EWF products are designed specifically for use as a playground safety surface.

Grass and dirt are not considered protective surfacing especially in playground construction because wear and environmental factors reduce their shock absorbing effectiveness. Athletic / sports fields using dirt and grass have additional challenges with regard to weather, durability, and maintenance.

Wood mulch (not CCA-treated*) and wood chips compress at least 25% over time due to use and weathering, require greater depth for safety, frequent maintenance to ensure surface levels never drop below the minimum depth, and are subject to standing water and freezing in winter. *CCA = chromated copper arsenate

Pea gravel and sand do not provide suitable fall protection when considering fall height. These products are more typically used in sand boxes, activity walls at ground level, around play houses, or any other equipment children use at ground level.

Unitary surfacing materials such as “poured in place” rubber surfacing consists of rubber mats and tiles or combination of energy-absorbing materials held in place by a binder that may be pour in place at the playground site and then cured to form a unitary shock absorbing surface. Unitary materials are available from a number of different manufacturers, many of whom have a range of materials with differing shock absorbing properties.

PHAC and CEAC Recommendations from 2008

Both groups were asked to make recommendations in 2008 related to recycled tires; see attachments A and B.

Formation of Joint Recycled Tire Committee

The following members volunteered to form a Joint Recycled Tire Committee and report/update their respective organizations:

- **CEAC:** Anna Abruzzese (CEAC chair), Andrew Murray (CEAC vice chair), Jenna Grove (Clean Water Action), Meleah Houseknecht, and sitting in for Adam Arvidson, CEAC MPRB member – Jon Duesman, PLA - MPRB
- **PHAC:** Karen Soderberg, PHAC co-chair & Ward 7 rep; Joey Colianni, member at large; Craig Hedberg, University of Minnesota – School of Public Health; and sitting in for the PHAC MPS representative - Lee Setter, Manager - MPS Environmental Health & Safety

Related Meetings by Joint Recycled Tire Committee

- August 23, 2016: Presentation by Play It Safe Minnesota, a non-profit organization that is seeking a ban on recycled tires in playgrounds and fields. This group made a presentation to HECE in June, which resulted in City Council direction for the joint committee study and request to develop a set of recommendations.
- September 8, 2016: Presentations by Minneapolis Public Schools (MPS) and Minneapolis Park and Recreation Board (MPRB). Key points of each presentation are summarized below.
- October 25, 2016: Presentations by William Toscano, PhD, Professor-Environmental Health Sciences, University of Minnesota-School of Public Health (UMN-SPH); Matt Simcik, PhD, Associate Professor-Environmental Health Sciences, UMN-SPH; and Michael Peterson, M.E.M, DABT, Sr. Toxicologist with Gradient. Professor Toscano is a toxicologist who studies endocrine disruption; Professor Simcik is an environmental chemist who has advised several school districts on this issue; and, Mr. Peterson is an industry representative specializing in human health risk assessment.
- November 29, 2016: At the regularly scheduled PHAC meeting, committee members reviewed draft recommendations, provided discussion and suggested edits. Edits were reviewed and a motion to approve was seconded. The recommendations as amended were approved by voice vote with one opposed.
- December 8, 2016: At the regularly scheduled CEAC meeting, committee members reviewed draft recommendations approved by PHAC and after additional discussion approved by voice vote with one abstention.

To create an open process of sharing information, representatives of Minneapolis Public Schools, Minneapolis Park and Recreation Board, Play It Safe Minnesota, and Field Turf were invited to present to the joint sub-committee. Other interested guests were informed of and invited to the joint committee meetings as well. All meeting information including agendas, presentations, and meeting notes / minutes were posted on the Public Health Advisory Committee webpage.

Minneapolis Context

- **MPS** currently has 47 playground areas (of 66 total) with rubber mulch, eight (8) have engineered wood mulch, ten (10) playground areas (tot lots) use sand, one pour-in-place at new Dowling Adaptive playground, and one synthetic turf field with crumb rubber infill at Washburn High School.
 - Previous complaints about wood mulch concerned mold, safety, freezing, and drainage.
 - Rubber tire mulch used because at the time, it was promoted by the EPA and Consumer Product Safety Commission for safety, durability, and the product does not degrade.
 - MPS is temporarily on hold with the conversion of the last eight (8) engineered wood mulch playgrounds to engineered rubber mulch. This temporary hold allows time for government studies on the use of engineered rubber mulch and conclusive links to health hazards. They do not have any immediate plans to add more artificial turf fields at this time.
 - MPS is performing routine maintenance on existing engineered rubber mulch playgrounds.
 - See Attachment C for more detailed information. (Handout from September 8, 2016 meeting)
- **MPRB** uses artificial turf with crumb rubber infill in 8 locations. No crumb rubber or synthetic turf is used on playgrounds, rather MPRB playgrounds use pour-in-place combined with sand or engineered wood fiber.
 - Artificial turf with crumb rubber infill withstands the wear-and-tear of lengthy seasonal use and heavy demand.
 - MPRB has started allocating rehabilitation funds in its capital plan in 2019-2020 for older artificial turf fields.
 - See Attachment D for more detailed information. (Handout from September 8, 2016 meeting)

- **Both MPS and MPRB** rely on the U.S. Consumer Product Safety Commission’s “Public Playground Safety Handbook” for guidance which identifies shredded/recycled rubber mulch as an “Appropriate Surfacing” product, given that this product can meet impact attenuation requirements of ASTM F1292, as long as minimum depths of the material are maintained as specified in Table 2 of Section 2.5 in the Handbook. This notation is “solely focused on the impact attenuation to minimize serious head injuries, and not on other aspects that may pose other risks, such as chemical exposure or ingestion.” (See Attachment E, cover page plus pages 8-10).
- It is unknown how many playground areas and artificial fields are in the City from other sources such as places of worship, private schools, day care centers, etc.

Federal and State Activities

- **Federal:** On February 12, 2016 the U.S. Environmental Protection Agency (EPA), the Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (ATSDR), and the U.S. Consumer Product Safety Commission (CPSC) launched a multi-agency action plan to study key environmental human health questions. By late 2016, the agencies will release a draft status report that describes the findings and conclusions of the research through that point in time. The report will also outline any additional research needs and next steps. The full report will be released at a later date.
- **State of Minnesota:**
 - 1) The Minnesota Department of Health (MDH) put out fact sheet on crumb rubber in April 2016. (See Attachment F) Their fact sheet references two major studies that are currently underway: the EPA study referenced above and a study by the California Office of Health Hazard Assessment which will run through 2018.
 - MDH is tracking these studies and will consider their results in any future recommendations regarding the use of crumb rubber in synthetic turf fields.
 - 2) Hennepin County and Bloomington-Richfield-Edina public health departments are currently not studying the public health effects of crumb rubber – tire mulch.
 - In April 2016, the Edina school board approved conversion of four grass fields to artificial turf and a fifth synthetic field is being replaced with new crumb rubber.
 - On May 12, the Edina Energy and Environment Commission voted to condemn the use of crumb rubber in Edina.
 - 3) In June 2016, the Duluth School Board voted to move forward with plans to replace the rubber mulch used on most district elementary school playgrounds. The board voted unanimously on the measure with plans to have the rubber mulch removed by the start of the 2017-2018 school year.
 - 4) During the 2015 legislative session, two bills were introduced: House File 3496 (HF3496) and Senate File 3108 (SF3108). The proposed legislation would have established a moratorium on the use of recycled tire mulch and crumb rubber on any new construction of public parks and school playgrounds until 2019. Public parks and school playgrounds already utilizing the material would have been required to post signs to educate users on ways to reduce exposure. House File 3496 was referred to the Committee on Government Operations and Elections Policy and given an informational hearing; Senate File 3108 was referred to the Committee on Environment and Energy and received no hearing.

Joint Committee Key Findings

- 1) Everyone wants to ensure the safety and well-being of our children and community.
- 2) The City does not operate any fields / parks but has political power, influence, and partnerships which could be leveraged.

- 3) The chemical composition of tire rubber is designed to enhance the functionality of tires on automobiles and trucks. Tire rubber contains a variety of chemicals that are known to be toxic; however, it remains to be determined whether the extent of exposure to these chemicals on play surfaces covered by recycled tire materials poses an actual health risk.
- 4) Concerns have been raised about possible toxic effects of recycled tires, including off-gas, ingestion, surface overheating, along with ground water, soil contamination.
- 5) Surface material selection and proper installation play a crucial role in creating safer playground areas and minimize injuries associated with playground equipment.
- 6) It is a difficult balance between competing concerns which include: increasing playtime outside (given Minnesota's shorter playing seasons), safety and injury management, cost of installation and ongoing maintenance, and field/playground durability.
- 7) Crumb rubber infill and / or rubber tire mulch in existing playgrounds and athletic fields is costly to replace. (See Handouts C & D from MPS and MPRB)
- 8) **MPS** has potential legal liability for playground fall injuries where protection does not meet standards.
- 9) **MDH** is tracking two important studies currently underway examining potential health effects from crumb rubber and synthetic turf. One is being led by the federal Environmental Protection Agency. The second is by the California Office of Health Hazard Assessment and will run through mid-2019. (See Attachment G)
 - a. **The EPA study** may not present findings that are dramatically different from what is currently known, but a draft report will not be available until late 2016.
 - b. **The California study** is including biological measures over time and may provide more information on long-term health effects, but is not due to be completed until mid-2019.

Recommendations: Based on the committees' learning and discussions, we recommend a moratorium on City financed projects-outside of Neighborhood Park Plan 2020 financing-regarding the use of crumb rubber-rubber tire mulch until 12/31/2019 (see #2 below) and that the City convene its partners and stakeholders in planning out thoughtful proactive approaches and contingency plans during the time of the moratorium (see #1 below).

- 1) Given the City's political power and influence, we recommend leveraging partnerships which have the same goals in mind, those of: safety, injury management, healthy active living, and outdoor recreation. Specifically, we recommend that:
 - a. Representatives from the City Council, MPS, MPRB and other stakeholders follow this issue closely and collaborate to plan out thoughtful proactive approaches and identify resources.
 - b. City Council support its partners' investment in finding alternatives by asking stakeholders to begin to develop contingency plans, timelines, and budgets for change from rubber mulch, crumb rubber to potentially less toxic options without sacrificing safety. The contingency plans may vary by partner depending on patterns of use, options for replacement, type of installation, and budgetary considerations.
 - c. The City Council actively support efforts by other agencies and partners operating in the City in their efforts to address community concerns, including advocacy and support for additional funding for alternative materials if warranted.
 - d. An inventory of all fields and playgrounds in the City including those located at places of worship, private schools, day care centers, etc. in Minneapolis. This inventory would provide scope and scale if future action is desired or required. The City should partner with existing organizations that are undertaking this work. The inventory should include location, approximate square footage, and estimated usage.
 - e. The City engage in raising awareness with users and property owners of the use of crumb rubber infill and recycled tire mulch about the simple precautions that can be taken as recommended by Minnesota Department of Health. (See Attachment F, page 2)

- 2) Given that two significant studies from the EPA and the California Office of Environmental Health Hazard are underway and that MDH is awaiting results of these studies before moving forward with recommendations / guidelines, we recommend a moratorium on the use of city funding, in the form of grants or direct appropriations to city- or community-led projects, for all new development of fields / playgrounds using crumb rubber infill or for fields / playgrounds converting current wood fiber to rubber mulch. This moratorium would not apply to the city's fund transfer to MPRB under the NPP20 agreement.
- a. A moratorium would be dated to end 12/31/2019. A time-dated moratorium provides the City and its partners / stakeholders opportunities to engage in dialogue, collaboration, and problem-solving given that planning processes take several years. Special considerations related to this moratorium include:
 - i. Rubber mulch used in playgrounds and crumb rubber infill currently in use would need to be maintained to the proper safety depth.
 - ii. It is costly to replace crumb rubber infill and / or rubber tire mulch in existing playgrounds and athletic fields (See Attachments C and D). City-partner-stakeholder conversations need to include a mechanism for addressing timing and cost.
 - iii. MPRB has plans in 2019 to expand the existing synthetic field at Currie Park (which currently includes crumb rubber) from a single youth-sized field to a double youth-sized synthetic (premier) surface. This project has high community engagement and a delay is expected to be unwelcome. MPRB and the City should collaborate to ensure that alternative options to crumb rubber can be considered within the project budget and timeframe (see recommendation 1c).
 - b. A moratorium provides time for the City to convene a partner / stakeholder group to discuss collaborative efforts on what to do, for the development of contingency plans, and to complete an inventory of all fields impacted by potential future decisions / actions.
 - c. A moratorium provides opportunities to educate users and property owners on crumb rubber infill and recycled tire mulch about the simple precautions that can be taken.
 - d. A moratorium provides opportunities to engage residents in this discussion related to fields and playgrounds in their neighborhoods.

In order to help support these recommendations, PHAC and CEAC will continue to monitor the issue and may be called on to provide insight and perspectives throughout the time period of the moratorium and after more substantial scientific studies have been completed.



TO: Operations & Environment Committee

FROM: Jeremy Barrick, Assistant Superintendent for Environmental Steward

DATE: April 12, 2017

SUBJECT: Minnesota Department of Agriculture Update on Gypsy Moth Find in Richfield, MN

BACKGROUND

The Minnesota Department of Agriculture (MDA) is the state agency that monitors invasive and destructive pests in Minnesota. Most recently the Minneapolis Park and Recreation Board (MPRB) Forestry Department has worked closely with the MDA to manage Emerald Ash Borer after it was discovered in 2010. Prior to this, in 2001, the Forestry Department assisted the MDA with searching for and managing a different invasive insect called Gypsy Moth (GM).

The GM is not native to the United States. They were imported to New England from Asia in the 1800s to replace silk worms. Unfortunately they escaped and have been continually spreading westward. Ranked among America's most destructive tree pests, GM has caused millions of dollars in damage. The pests are common in Wisconsin and are now establishing themselves in Minnesota.

Tree damage is caused by GM caterpillars which are voracious eaters and can strip trees of their leaves. They have been known to defoliate large sections of forest and urban areas. The preferred host species include oaks, aspen, paper birch, basswood and willow. These are all very common trees in Minnesota. High numbers of GM caterpillars can cause a substantial public nuisance, a reduction in tree growth, branch dieback and tree death.

As part of its ongoing monitoring program the MDA discovered GM in the northwest corner of Richfield, MN. The MDA implemented a quarantine of the area in November 2016. When an infestation is found, the MDA conducts aerial treatments of the infestation before it can spread. MDA is planning to tackle this GM infestation this spring. In anticipation of the treatment, the MDA hosted an open house on March 1, 2017 in Richfield (Attachment A).

The MDA is developing a treatment plan for the affected area that runs from West 61st Street in Minneapolis on the north to West 67th Street in Richfield on the south, and Washburn Avenue South on the west to Logan Avenue South on the east (Attachment B). Because a portion of the treatment area is in Minneapolis, Kimberly Thielen Cremers is attending the MPRB Operations & Environment Committee to provide information to Commissioners. Ms. Thielen Cremers is the Supervisor of the MDA's Pest Mitigation and Biocontrol Unit.



Over the years, the MDA has successfully treated dozens of GM infestations across eastern Minnesota from Grand Portage to the Twin Cities to Houston County. These successful treatments help postpone the full-scale invasion of gypsy moth, saving local communities and homeowners money and protecting the health of the state's urban and natural forests.

RECOMMENDATION

This item is for discussion purposes.

ATTACHMENTS:

- Attachment a - MDA News Release 2/16/17 (PDF)
- Attachment B - MDA Gypsy Moth Management Proposal (PDF)

Prepared By: Ralph Sievert, Director of Forestry, Forestry

Review:

Ralph C. Sievert Completed 03/28/2017 4:54 PM

Jeremy Barrick Completed 03/29/2017 12:02 AM

Jayne Miller Completed 04/01/2017 8:33 PM

Operations & Environment Committee Pending 04/12/2017 5:10 PM

News Release



FOR IMMEDIATE RELEASE: Thursday, February 16, 2017

MDA planning gypsy moth treatment for Richfield/Minneapolis area in 2017

Public information meeting set for March 1

ST. PAUL, Minn. –The Minnesota Department of Agriculture (MDA) and partner organizations are planning to tackle a gypsy moth infestation in parts of Richfield and Minneapolis this spring. In anticipation of the treatment, the department is inviting people to learn about the effort at an open house to be held March 1 in Richfield.

Ranked among America's most destructive tree pests, gypsy moth has caused millions of dollars in damage to forests as it has spread from New England to Wisconsin in recent decades. Gypsy moth caterpillars can defoliate large sections of forest. The pests are common in Wisconsin and are now establishing themselves in Minnesota.

The MDA maintains a monitoring program to watch for start-up infestations, and when an infestation is found, the department conducts aerial treatments of the infestation before it can spread. In 2016, the MDA found an infestation in the northwest corner of Richfield. The MDA implemented a quarantine of the area in November. The department is now developing a treatment plan for an affected area that runs from West 61st Street in Minneapolis on the north to West 67th Street in Richfield on the south, and Washburn Avenue South on the west to Logan Avenue South on the east. (SEE MAP) Details of the area can be found at www.mda.state.mn.us/gmtreatments.

The MDA will host an open house to share information with citizens about the threat gypsy moths pose to the environment, and how officials plan to protect the urban forest.

- Wednesday, March 1, 2017
4:00 – 6:30 p.m.
Sheridan Hills Elementary School
6400 Sheridan Avenue S
Richfield, MN 55423

Over the years, the MDA has successfully treated dozens of gypsy moth infestations across eastern Minnesota from Grand Portage to the Twin Cities to Houston County. These successful treatments help postpone the full-scale invasion of gypsy moth, saving local communities and homeowners money and protecting the health of the state's urban and natural forests.

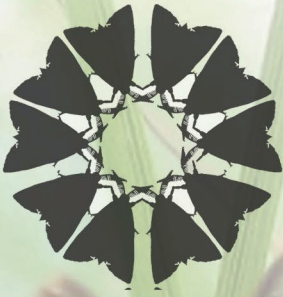
For more information on the proposed treatments, go to www.mda.state.mn.us/gmtreatments.

MEDIA CONTACT: Allen Sommerfeld, MDA Communications
651-201-6185 / allen.sommerfeld@state.mn.us

- 30 -

www.youtube.com/mnagriculture • www.twitter.com/mnagriculture • www.facebook.com/mnagriculture
625 Robert St. N. • St. Paul, MN 55155-2538 • 1-800-967-2474 • www.mda.state.mn.us

In accordance with the Americans with Disabilities Act, this information is available in alternative forms of communication upon request by calling 651-201-6000. TTY users can call the Minnesota Relay Service at 711.
The MDA is an equal opportunity employer and provider.



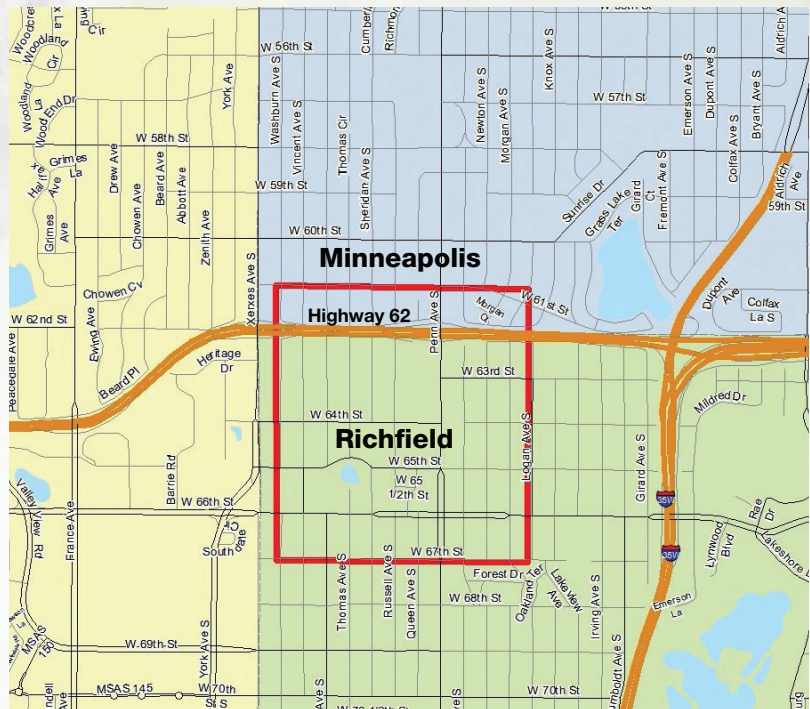
Proposal for Gypsy Moth Management

Richfield/Minneapolis, Minnesota, 2017



The Minnesota Department of Agriculture (MDA), in collaboration with federal, state, and local partners, is proposing to treat an isolated gypsy moth population in the cities of Richfield and Minneapolis in the spring of 2017. A state monitoring program in 2016 found a high number of moths in the area. These results, combined with follow-up site visits that found gypsy moth egg masses, prompted the MDA and the Minnesota Gypsy Moth Program Advisory Committee to develop proposed treatments for 2017. The proposal includes treating 329 acres for gypsy moth.

A complete description of all the 2017 treatments as proposed will be available on MDA's website, www.mda.state.mn.us/gypsymoth. You can also find out more by attending a local meeting. Information on that meeting is at the end of this bulletin.



2017 Richfield and Minneapolis proposed treatment area

In accordance with the Americans with Disabilities Act, this information is available in alternative forms of communication upon request by calling 651-201-6000. TTY users can call the Minnesota Relay Service at 711. The MDA is an equal opportunity employer and provider

Information about gypsy moth

What is a gypsy moth and why control it?



Gypsy moth defoliated this oak tree.
www.entomology.wisc.edu

The European gypsy moth (*Lymantria dispar* (L.)) is not native to the United States. After being introduced in Massachusetts in the late 1800s, gypsy moth has continuously moved westward and southward and is now established in northeastern Minnesota. Gypsy moth caterpillars are voracious eaters and can strip trees of their leaves. The preferred host species include oaks, aspen, paper birch, basswood and willow, which are all very common trees in Minnesota. High numbers of gypsy moth caterpillars can cause a substantial public nuisance, a reduction in tree growth, branch dieback and tree death.

The treatments proposed for 2017 will not only decrease the possibility of defoliation but will delay the arrival and expansion of gypsy moth in Minnesota and beyond. This delay can hold off a costly, full-scale infestation and protect natural and urban forest health, local property values, and the quality of outdoor recreation activities.

How do we control gypsy moth?

Since 1973, the State of Minnesota has been actively surveying for gypsy moth. Our first gypsy moth eradication project was conducted in 1980. Since that time, and in partnership with the federal Slow the Spread program, over 820,000 acres have been treated in Minnesota to eradicate or slow advancing gypsy moth populations. In recent history, treatments have been conducted in the cities of Duluth (2011, 2014), Minnetonka (2011), Coon Rapids (2011), Oak Grove (2014), and Ely (2016).

Throughout the years, the MDA has used two different methods: 1) a biological insecticide called *Bacillus thuringiensis* var. *kurstaki* (Btk) or, 2) a mating disruption treatment, to control gypsy moth in Minnesota. For this proposed treatment, the MDA and its partners recommend using Btk on the 329 acre area in Richfield.

Information about Btk

What is Btk?

Bacillus thuringiensis var. *kurstaki* (Btk) is an organic, biological insecticide that works well at killing gypsy moth caterpillars. The active ingredients are crystalline proteins formed by naturally-occurring bacteria. When ingested, the proteins are toxic to certain susceptible caterpillars like the gypsy moth. Caterpillars stop feeding and die within a couple days. Btk is broken down naturally by sunlight so two applications about a week apart are used to make sure all gypsy moth caterpillars are exposed to the bacteria.

How and when is Btk applied?

The proposed Btk treatments will take place in May when gypsy moth caterpillars are very small. Treatments generally take place very early in the morning using an airplane or helicopter. The aerial treatments are at low altitude (approximately 50 feet above the treetops). The aircraft are equipped with the latest available technology including Global Positioning Systems to help ensure application accuracy. Non-forested areas such as large fields, stretches of pavement, and open bodies of water are excluded from the treatments. You may see or hear the low flying aircraft in your area for a short period of time.

Exact dates and times depend greatly on weather conditions and insect development. You will be notified days in advance of any treatments through a variety of ways:

- **Check your mail.** We will be sending a postcard in late April that will identify a timeframe for the treatments.
- **Call MDA's Arrest the Pest line (888-545-6684).** The phone line will be updated with treatment information frequently.
- **Follow the MDA on social media.** Live updates will be made up to and on the day of treatment.
 - Twitter at twitter.com/mnagriculture
 - Facebook at www.facebook.com/mnagriculture
- **Sign up for email updates.** Go to www.mda.state.mn.us/gypsymoth to get email updates before treatments.

What are the environmental and human health effects of Btk?

Btk toxicity is generally limited to caterpillars. Caterpillars are the immature stage of moths and butterflies. To have any effects, caterpillars must be actively feeding within approximately two weeks after treatment, they must eat the Btk, and they must be susceptible to the bacteria. The MDA works with the Minnesota Department of Natural Resources and the U.S. Fish and Wildlife Service to identify, and evaluate impacts to any threatened or endangered species and ensure that no known sites of sensitive, threatened, or endangered species of moths and butterflies overlap with this year's proposed Btk treatments.

Btk is produced from a bacteria found in soils, plants and insects worldwide. It is cultured by fermenting grains and potatoes with fish or cornmeal – a process similar to brewing beer. The final product contains water, Btk, leftover growth medium, carbohydrates, and other ingredients approved as food additives. The product breaks down quickly in sunlight, but is extremely potent to gypsy moths and can kill nearly 100% in treated areas under proper conditions.

Numerous studies have documented the low risk of Btk for humans, pets, and other species. Btk is a common product that is approved for use in organic farming, and is an alternative to chemical pesticides. Unlike a broad-spectrum pesticide, Btk has a very narrow target of caterpillars so it will not disrupt the balance of nature. More information can be found at www.mda.state.mn.us/gypsymoth. Click on "Learn more about Gypsy Moth."

If you have individual human health concerns about Btk, contact your physician or other health care professional. For general questions about health risks or steps to prevent or reduce exposures to Btk, see the Minnesota Department of Health website at: www.health.state.mn.us/divs/eh/pesticide/bt.html or call 651-201-4899.

Getting more information

What happens next?

Public involvement and participation is encouraged. Citizens are invited to submit comments about the gypsy moth treatment proposal in writing to the MDA. All comments will be reviewed and a response will be given. Comments received by March 20 will be most useful for identifying issues and alternatives. Contact information is provided at the end of this bulletin.

A postcard will be mailed to residents in the proposed treatment area in late April that will identify a timeframe for the treatment.

Where can I find out more?

The MDA and its partners are providing information about the gypsy moth, trapping data, and the proposed treatments at local government and community organization meetings. Please join us at a meeting near you. You are also encouraged to contact us with questions or comments using our contact information below.

Please join us at a 2017 Open House

Wednesday, March 1, 2017	Sheridan Hills Elementary School	4:00-6:30 pm
6400 Sheridan Ave. So., Richfield, MN 55423		

There will be no formal presentation at these locations. We invite you to take advantage of one-on-one time with several experts from participating agencies that will be available to explain the treatment proposal and answer your questions.

Contact Us:

Minnesota Department of Agriculture
625 Robert St. N.
St. Paul, MN 55155

Website: www.mda.state.mn.us/gypsymoth
Email: gypsy.moth@state.mn.us
Arrest the Pest Info Line: 888-545-6684 (MOTH)



Connect with Us:

To track the latest news on gypsy moth treatments, follow the Minnesota Department of Agriculture on:

Facebook: www.facebook.com/mnagriculture

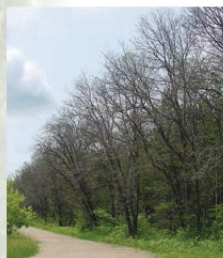
Twitter: twitter.com/mnagriculture

Email: go to www.mda.state.mn.us/gypsymoth to sign up for email updates



Plant Protection Division

625 Robert St. N.
St. Paul, MN 55155-2538



Gypsy Moth,

has been found in
your neighborhood!

Join us on
Wednesday, March 1, 2017
to learn about
a plan to
save our trees