

**Winnetka Village Council
REGULAR MEETING
Village Hall
510 Green Bay Road
Tuesday, August 19, 2014
7:00 p.m.**

Emails regarding any agenda item are welcomed. Please email contactcouncil@winnetka.org, and your email will be relayed to the Council members. Emails for the Tuesday Council meeting must be received by Monday at 4 p.m. Any email may be subject to disclosure under the Freedom of Information Act.

AGENDA

- 1) Call to Order
- 2) Pledge of Allegiance
- 3) Quorum
 - a) September 2, 2014 Regular Meeting
 - b) September 9, 2014 Study Session
 - c) September 16, 2014 Regular Meeting
- 4) Approval of Agenda
- 5) Consent Agenda
 - a) Approval of Village Council Minutes
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- 7) Ordinances and Resolutions
 - a) Ordinance MC-6-2014: Reimbursement of Third Party and Professional Fees – Adoption26
 - b) Ordinance MC-7-2014: Implementing a Ban on Coal Tar-Based Pavement Sealants – Adoption34
- 8) Public Comment
- 9) Old Business: None.

10) New Business

- a) Intergovernmental Agreement with MWRD – Northwest Winnetka Stormwater Funding102
- b) Comprehensive Annual Financial Report (CAFR).....119
- c) New Trier High School: Preliminary Design Progress.....120

11) Appointments

12) Reports

13) Executive Session

14) Adjournment

NOTICE

All agenda materials are available at villageofwinnetka.org (Government > Council Information > Agenda Packets & Minutes); the Reference Desk at the Winnetka Library; or in the Manager’s Office at Village Hall (2nd floor).

Broadcasts of the Village Council meetings are televised on Channel 10 and AT&T Uverse Channel 99 every night at 7 PM. Webcasts of the meeting may also be viewed on the Internet via a link on the Village’s web site: <http://winn-media.com/videos/>

The Village of Winnetka, in compliance with the Americans with Disabilities Act, requests that all persons with disabilities who require certain accommodations to allow them to observe and/or participate in this meeting or have questions about the accessibility of the meeting or facilities, contact the Village ADA Coordinator – Megan Pierce, at 510 Green Bay Road, Winnetka, Illinois 60093, 847-716-3543; T.D.D. 847-501-6041.

**MINUTES
WINNETKA VILLAGE COUNCIL
REGULAR MEETING
August 5, 2014**

(Approved: xx)

A record of a legally convened meeting of the Council of the Village of Winnetka, which was held in the Village Hall Council Chambers on Tuesday, August 5, 2014, at 7:00 p.m.

- 1) Call to Order. President Greable called the meeting to order at 7:04 p.m. Present: Trustees Arthur Braun, Carol Fessler, Richard Kates, William Krucks, Stuart McCrary, and Marilyn Prodromos. Absent: None. Also present: Village Manager Robert Bahan, Assistant to the Village Manager Megan Pierce, Village Attorney Peter M. Friedman, Community Development Director Mike D’Onofrio, Assistant Community Development Director Brian Norkus, Assistant Public Works Director Jim Bernahl, and approximately 27 persons in the audience.
- 2) Pledge of Allegiance. President Greable led the group in the Pledge of Allegiance.
- 3) Quorum.
 - a) August 12, 2014 Study Session. Cancelled.
 - b) August 19, 2014 Regular Meeting. All of the Council members present, with the exception of Trustee Prodromos, indicated that they expected to attend.
 - c) September 2, 2014 Regular Meeting. All of the Council members present indicated that they expected to attend.
- 4) Approval of the Agenda. Trustee McCrary, seconded by Trustee Braun, moved to approve the Agenda. By roll call vote, the motion carried. Ayes: Trustees Braun, Fessler, Kates, Krucks, McCrary and Prodromos. Nays: None. Absent: None.
- 5) Consent Agenda
 - a) Village Council Minutes.
 - i) July 8, 2014 Study Session.
 - ii) July 15, 2014 Regular Meeting, as amended.
 - b) Warrant List. Approving the Warrant List dated 7/11/14 to 7/31/14 in the amount of \$2,408,687.39.
 - c) Resolution R-24-2014: Cook County Data Sharing Agreement – Adoption. A resolution authorizing Staff to sign an intergovernmental agreement that allows the Village to access Cook County’s digital Geographic Information System data.

Trustee Fessler, seconded by Trustee McCrary, moved to approve the foregoing items on the Consent Agenda by omnibus vote. By roll call vote, the motion carried. Ayes: Trustees Braun, Fessler, Kates, Krucks, McCrary and Prodromos. Nays: None. Absent: None.
- 6) Stormwater Update. None.

7) Ordinances and Resolutions.

- a) Ordinance M-8-2014: 620 Lincoln Avenue, Special Use Permit for Winnetka Community House – Waiver of Introduction/Adoption. Mr. D’Onofrio explained that the Community House proposes installation of a Children’s Garden to the south of their existing property. Since the Community House is permitted only as a special use in the B-1 multi-family residential zoning district, the addition of the garden requires approval of a special use permit. He described the landscaping and other details of the proposed garden, which include brick walkways and terraces, a greenhouse, pergola, playhouse and shed. The Plan Commission, Design Review Board and Zoning Board of Appeals all voted unanimously to recommend approval of the special use permit. A waiver of introduction is being sought in order to expedite construction of the garden.

There were no questions from the Council or the audience, and the Council voiced strong support for the project.

Trustee Fessler, seconded by Trustee Prodromos, moved to waive introduction of Ordinance M-8-2014. By roll call vote, the motion carried. Ayes: Trustees Braun, Fessler, Kates, Krucks, McCrary and Prodromos. Nays: None. Absent: None.

Trustee Fessler, seconded by Trustee McCrary, moved to adopt Ordinance M-8-2014. By roll call vote, the motion carried. Ayes: Trustees Braun, Fessler, Kates, Krucks, McCrary and Prodromos. Nays: None. Absent: None.

- b) Ordinance MC-6-2014: Reimbursement of Third Party and Professional Fees – Waiver of Introduction/Adoption. Attorney Friedman explained that the Village often obtains outside professional services in conjunction with the review and disposition of applications for Village approval on various matters. While the current General Fee Resolution provides for reimbursement by the applicant in such cases, codification of a more effective process would ensure that the Village recovers all of the costs that are incurred. He said the subject Ordinance sets forth guidelines aimed at clarifying legal expenses in light of the recent change to outside legal counsel. Under the proposed Ordinance, applicants will be required to deposit the estimated third-party fees in an escrow account, and a final accounting of the actual fees owed will be performed after the application review is complete.

Attorney Friedman said routine matters such as resident requests for zoning variations are covered under the Village Attorney’s retainer, and therefore no reimbursement would be necessary. He explained that the Village already receives reimbursement for non-retainer matters under the current Code. In addition, before an escrow deposit is made, non-retainer legal fees must first be reviewed and approved by the Village Manager. The draft Ordinance makes clear that fees are applicable only if the Village incurs third-party costs in its review of an application.

Responding to a question about whether other municipalities have similar provisions, Attorney Friedman said it is standard practice in Northbrook, Highland Park, Kenilworth, Wilmette and Lake Forest, as well as many other towns in the Chicago area.

Trustee Braun expressed concern that some services which were previously handled by the in-house attorney will now be billed to applicants as a result of the outsourcing of the legal department.

Manager Bahan explained that the Code contains a requirement for payment of third-party fees; however, there are no provisions for a payment method. He noted that the only change being contemplated is the requirement for creation of an escrow account in cases where Staff estimates the Village will incur outside costs. No revisions are being made that will extend the scope of the General Fee Resolution.

The Council briefly discussed the draft Ordinance, and reached nearly unanimous consensus to adopt the Ordinance in the interest of fairness and ease of understanding the fee requirements. Trustee Braun said he could not support passage of the Ordinance, as he believed an additional cost burden will be placed on residents.

Trustee Krucks, seconded by Trustee McCrary, moved to waive introduction of Ordinance MC-6-2014. By roll call vote, the motion failed. Ayes: Trustees Fessler, Kates, Krucks, McCrary and Prodromos. Nays: Trustee Braun. Absent: None.

Trustee Krucks, seconded by Trustee McCrary, moved to introduce Ordinance MC-6-2014. By roll call vote, the motion carried. Ayes: Trustees Fessler, Kates, Krucks, McCrary and Prodromos. Nays: Trustee Braun. Absent: None.

c) Ordinance MC-7-2014: Implementing a Ban on Coal Tar-Based Pavement Sealants .

Mr. Bernahl explained that in April, the Village Council charged the Environmental & Forestry Commission (EFC) with reviewing the use of coal tar-based (CTB) products in the Village. After the Council discussed the EFC's findings at the July Study Session, it directed staff to develop a draft ordinance banning CTB sealants in the Village.

Mr. Bernahl said the proposed Ordinance would amend the Village Code to define CTB sealants as a nuisance, and require licensing of applicators. He added that the Village would conduct a robust public education campaign before beginning enforcement of the ban.

Trustee Krucks asked Chuck Dowding, EFC Chair, to review the risks associated with CTB sealants.

Mr. Dowding said the EFC researched the chemical constituencies of CTB products, and found that they contain benzene compounds. Research shows benzenes are toxic to humans and animals, and the EPA monitors them to address concerns about drinking water. At the end of its review, the EFC concluded that banning CTB sealants would be beneficial for the community.

Trustee McCrary said he is the Council liaison to the EFC, and he was impressed with the work the Commission did in analyzing the CTB sealants. He noted that the EFC received a lot of marketing material from both sides of the issue, most of it written with a biased viewpoint.

Trustee Fessler said she felt the EFC's research was one-sided and introducing an ordinance seems premature. She wondered why environmental agencies have not banned CTB products if they are so dangerous, and added that she was uncomfortable taking action at the local level. However, if enacting a ban would help the Tunnel Project

receive permits, she would be open to a ban in that instance. Lastly, she asked for more information from the EFC which presents both sides of the issue.

Trustee Braun questioned the research on animals and asked if the exposures were comparable to human exposure when coal tar is used as a sealant.

President Greable said it is important for stormwater quality to keep harmful substances out of the storm sewer system, and he asked what sealants are being used in the Village currently.

Mr. Dowding replied that most people don't typically know what is being applied on their driveways and parking lots.

Trustee Prodromos noted that coal tar is prevalent in a lot of cosmetic products, is used for medicinal purposes and is found in drapes, car upholstery and other places. She said she would like to see more conclusive studies about the effects of exposure before taking action.

Mr. Dowding explained that the EFC's conclusions were drawn from the constituents of coal tar, not the finished sealant product. The chemical constituents cause cancer and are on a priority chemical list.

Trustee Kates said he agreed with the EFC's recommendations.

Cindy Skrukud, Clean Water Advocate for the Illinois Sierra Club. Ms. Skrukud said there are readily available and much less toxic alternatives to coal tar, including permeable pavement, which eradicates the need for sealants and helps prevent pollution at the source.

Responding to questions from several Trustees, Ms. Skrukud explained that McHenry County is a proponent of banning coal tar but feels that a state-wide ban is the best solution. She stated that the International Agency for Research on Cancer says coal tar is a proven cancer risk for humans, based on clear evidence from the Material Safety Data Sheet for coal tar.

Debbie Ross, 921 Tower Road. Ms. Ross said she called some of the suppliers of driveway sealant in Winnetka, and found that they all use coal tar. She urged the Council to move forward and ban coal tar, since it contains ingredients that are known carcinogens. She also recommended that the Village grant incentives to residents who use permeable pavers, which would encourage the practice.

Ted Wynnychenko, 1086 Oak. Mr. Wynnychenko said he supported the ban on coal tar for the sake of limiting the amount of carcinogens in drinking water, and he added that Minnesota has banned the substance. He stated that a few manufacturers of the product are influencing a whole community.

David Barecca, Barecca Blacktop Sealcoating. Mr. Barecca, a manufacturer of CTB sealant, distributed a letter to the Council in support of the product. He stated that coal tar is not toxic and does not penetrate into ground water because it is a solid. He said in his 30 years in the industry, he has never encountered anyone who has suffered adverse effects from coal tar sealer, and he added that asphalt sealers are inferior and very toxic. He explained that customer feedback about asphalt sealer is mostly negative.

Peter Barecca, Barecca Blacktop Sealcoating. Mr. Barecca said he and his brother have been working with coal tar since the early 1980's and neither of them has had cancer. He noted that customers like coal tar sealer for its esthetic value, and that it also doubles the life of an asphalt driveway.

Eleanor Prince, Kenilworth. Ms. Prince said the Village of Kenilworth has been researching pervious surfaces for driveways and parking lots.

Jeffrey Liss, 1364 Edgewood. Mr. Liss asked, in the absence of research on how widespread the use of coal tar seal sealants is in Winnetka, if the time and money spent on enforcing a ban be worth the results.

Kevin Shields, Sealmaster. Mr. Shields, a coal tar manufacturer, said data has not been generated to prove coal tar is harmful, and he urged the Council to look at both sides of the issue. He said while asphalt has a better environmental reputation, the predominant product used in the Chicago area is coal tar.

During the Council discussion that followed, Trustee Fessler moved to send the issue back the EFC for further analysis, saying she would like to see feedback from the Tunnel permitting agencies. She added that a concerted effort to ban a bundle of harmful substances should be made, rather than doing it piecemeal. Trustee Prodromos seconded the motion, and she stated that more information is needed before taking action. When it became clear through further Council dialog that the other Trustees would not vote affirmatively on the motion, Trustee Fessler withdrew it.

Trustee Kates, seconded by Trustee McCrary, moved to introduce Ordinance MC-7-2014. By voice vote, the motion carried.

8) Public Comment.

Ted Wynnychenko, 1086 Oak. Mr. Wynnychenko asked the Village to refund residents at a retail rate rather than the current wholesale rate, for electric service net metering purposes.

9) Old Business. None.

10) New Business.

a) Board and Commission Annual Update. President Greable thanked the Village's advisory boards for their hard work and dedication, and invited the Chair of each committee to deliver their annual progress report, which lists policy issues, significant accomplishments, and recommendations to the Council.

- Business Community Development Commission (BCDC): Jon Talty, Chair.

Policy Issues: Redevelopment of Post Office site; marketing and branding analysis; determining how commercial districts' built environments impact the business community and the Village at large; wayfinding; with assistance from the economic development coordinator, enhance communication with merchants and promote Winnetka's brand throughout the region.

Projects: Enhance development and promotion of Village-wide events; review the Urban Land Institute's (ULI) recommendations for the business districts; conduct business retention visits; develop an information packet about how to open a business; develop a BCDC website.

Recommendations: Consider implementation of BCDC recommendations regarding building height, parking and overlay district; consider establishing a budget for events in commercial districts that will benefit the Village at large, as well as business districts.

- Design Review Board (DRB): John Swierk, Chair.

Policy Issues: Community House Children's Garden; Greely School project, gas station in Hubbard Woods.

Projects: Reviewed 19 cases, including 7 for new businesses.

Recommendations: Develop a program for approval of minor signage or awnings to speed the process, while still maintaining an esthetically pleasing look throughout the Village.

- Environmental & Forestry Commission: Chuck Dowding, Chair.

Policy Issues: Recommendation of a ban on coal tar-based sealing products; deliberation of net metering and a water conservation goal; raised awareness of environmental issues and sustainable stewardship of the Village's environmental resources.

Projects: Revitalize the EFC web page; ready and willing to undertake special assignments relating to the Stormwater Management Program; continued support of recycling containers in the business districts.

Recommendations: Authorize the distribution of recycling containers, which are provided for in the budget, but not yet approved; outline a process for banning the use of coal tar-based sealants.

- Landmark Preservation Commission (LPC): Louise Holland, Chair.

Policy Issues: Reviewed 36 demolition applications: recommended a Historical Architectural Impact Study for five of them, and delayed one project by 60 days.

Projects: Top project was 1175 Whitebridge Hill, where the LPC was instrumental in saving the façade of the historic Jared Gage home. This was the first time the LPC was able to save an important part of Winnetka history from complete demolition.

Recommendations: Include a list of Winnetka landmarks as well as the National Register of Historic Places in the fall issue of the *Winnetka Report*; increase the delay for demolition permits to six months; budget funds for the annual Preservation Awards, and to allow the LPC to conduct a trolley tour in spring of 2015.

- Zoning Board of Appeals (ZBA): Joni Johnson, Chair.
Policy Issues: Two significant zoning cases; four special use permit requests; review of the BCDC’s parking and overlay district recommendations. The ZBA has significant concerns about several of the BCDC recommendations.
Projects: None, the ZBA’s duties are application-driven.
Recommendations: With the advice of the Village Attorney, update the ZBA’s Rules and Regulations, and pursue joint hearings with the Plan Commission on certain special use cases.
- Plan Commission (PC): Bill Krucks, former Chair.
Policy Issues: Review of ULI and BCDC recommendations.
Projects: Completion of parking recommendations is expected soon; review of four re-subdivision requests and two special use applications.
Recommendations: Solicit community feedback about the commercial districts; undertake a Commercial District Master Planning process to articulate a vision for the downtown areas; rewrite Chapter 5 of the Comprehensive Plan; develop a process for combined PC and ZBA special use application hearings in certain cases.

President Greable said he would like to have a discussion about a Master Plan for the commercial districts at the September Study Session. Manager Bahan said he could prepare a report, and he noted that there is budget capacity to begin the process.

- b) Plan Commission Recommendations: Building Height and Related Zoning.
Mr. D’Onofrio reviewed the Plan Commission’s process relating to its review of the BCDC’s ULI recommendations, which included analysis of the building height limitations of neighboring communities and study of a massing model created by Mr. Norkus to gain a visual perspective of the height issue.

Mr. D’Onofrio reviewed the Plan Commission’s recommendations:

Recommendation #1: introduce a two-tiered approach to commercial building height in the C-2 Commercial Zoning District by increasing the maximum allowable building height to either (a) four stories and 45 feet; or (b) 3 stories and 35 feet, to establish a transitional height district adjacent to single family residential areas.

Recommendation #2: Establish a new upper story setback which would require stories above the third floor to be stepped back from the front property line to maintain the existing building scale from the sidewalk.

Recommendation #3: Eliminate out-dated density and lot coverage standards that discourage development of residential units in the downtown areas.

Responding to a question about community sensitivity to the building height issue, Mr. Norkus recalled that during the drafting of the current Comprehensive Plan, *Winnetka 2020*, a survey indicated that people do have concerns about building height. He explained that in the late 1990’s the village lowered the building height limitation from four stories and 42 feet, in response to a development at Oak and Chestnut Streets. He said there are some areas in the Village where four stories are appropriate; however,

the transitional areas between commercial and single family districts defy a “one size fits all” approach.

Trustee Fessler asked for the desired outcome of the evening’s discussion.

Mr. Norkus said staff needs Council direction about whether to proceed with an amendment to the Zoning Code based on the consolidated recommendations of the ZBA, PC and BCDC, or would the Council prefer to wait until the accompanying parking recommendations are reviewed, so there would be a single revision to the Zoning Code.

Mr. D’Onofrio commented that the building height is one of three pieces needing direction, the other two being the overlay districts and parking.

Trustee Kates said he would not recommend a vote on Recommendation #3, as he felt the PC had never dealt with these items.

Mr. Norkus explained that a discussion of the obsolescence of the items took place at the May Plan Commission meeting.

Trustee Krucks recalled that there was discussion of antiquated and obsolete Zoning Code provisions which were duplicative of other provisions in the Building and Property Maintenance Code, and potentially in conflict.

Trustee Kates said he would prefer to send Recommendation #3 back the Plan Commission for more discussion.

The Council discussed its options, and opted to have a more complete discussion once the parking recommendations have been completed and reviewed by the Council.

11) Appointments.

- a) Trustee McCrary, seconded by Trustee Fessler, moved to appoint Thomas Kehoe to the Environmental & Forestry Commission for a full term, effective immediately. By voice vote, the motion carried.
- b) Trustee Fessler, seconded by Trustee McCrary, moved to appoint Katie Cory to the Business Community Development Commission for a full term, effective immediately. By voice vote, the motion carried.
- c) Trustee Kates, seconded by Trustee McCrary, moved to re-appoint Tom Eilers to the Business Community Development Commission for a full term, effective immediately. By voice vote, the motion carried.
- d) Trustee McCrary, seconded by Trustee Fessler, moved to re-appoint Caryn Rosen Adelman to the Environmental & Forestry Commission for a full term, effective immediately. By voice vote, the motion carried.

12) Reports.

- a) Village President. President Greable said the grant funds for the Northwest Winnetka Stormwater Project would be received soon.
- b) Trustees.
 - i) Trustee Krucks reported on the last Landmark Preservation Commission meeting.
 - ii) Trustee Kates reported on the most recent Plan Commission meeting.

- iii) Trustee Prodomos reported on the last Business Community Development meeting.
 - iv) Trustee Fessler gave an update on progress of the Village-wide survey, and the Council discussed the project at length.
 - c) Attorney. None.
 - d) Manager. Manager Bahan said the Metropolitan Water Reclamation District (MWRD) and the Village have come to terms on their intergovernmental agreement, which will be approved at the MWRD's next meeting, and then brought to the Council for its approval at the August 19 meeting.
- 13) Executive Session. None.
- 14) Adjournment. Trustee Braun, seconded by Trustee Fessler, moved to adjourn the meeting. By voice vote, the motion carried. The meeting adjourned at 11:48 p.m.

Deputy Clerk



Agenda Item Executive Summary

Title: Warrant List

Presenter: Robert M. Bahan, Village Manager

Agenda Date: 08/19/2014

Consent: YES NO

- | | |
|-------------------------------------|-------------------------|
| <input type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | Resolution |
| <input type="checkbox"/> | Bid Authorization/Award |
| <input type="checkbox"/> | Policy Direction |
| <input checked="" type="checkbox"/> | Informational Only |

Item History:

None.

Executive Summary:

The Warrant List for the August 19, 2014 Regular Council Meeting was emailed to each Village Council member.

Recommendation:

Consider approving the Warrant List for the August 19, 2014 Regular Council Meeting.

Attachments:

None.



Agenda Item Executive Summary

Title: Change Order for Secondary Cable, Wesco

Presenter: Brian Keys, Director of Water & Electric

Agenda Date: 08/19/2014

Consent: YES NO

- | | |
|-------------------------------------|-------------------------|
| <input type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | Resolution |
| <input checked="" type="checkbox"/> | Bid Authorization/Award |
| <input type="checkbox"/> | Policy Direction |
| <input type="checkbox"/> | Informational Only |

Item History:

The Water & Electric Department issued Bid Number #13-008 for the purchase of cable during the timeframe of April 1, 2013 through March 31, 2014. The bid covered both secondary cable (600V) and medium voltage (15kV) power cable. At the March 20, 2014 Council Meeting, the Village Manager was authorized to extend the purchase order for 600V secondary cable with Wesco through December 31, 2014.

Executive Summary:

Staff is requesting authorization to purchase additional quantities of secondary cable. This cable is used for street lights. The requested change order amount is \$2,380.

The Electric Fund FY 2014 Budget contains \$495,500 (account #500.42.31-660) for the purchase of cable. Prior to this request, the Village Council has previously approved \$346,965 of cable purchases from the 2014 budget.

Recommendation:

Consider authorizing the Village Manager to award a change order to Wesco in the amount of \$2,380 for the purchase of 600 volt secondary cable at the unit prices bid, subject to the contract conditions.

Attachments:

Agenda Report dated August 13, 2014

AGENDA REPORT

SUBJECT: Change Order for Secondary Cable, Wesco

PREPARED BY: Brian Keys, Director Water & Electric

REF: October 14, 2013 Budget Presentation
 March 20, 2014 Village Council Meeting, pp. 20-23
 June 24, 2014 Village Council Meeting, pp. 25-28

DATE: August 13, 2014

The Water & Electric Department issued Bid Number #13-008 for the purchase of cable during the timeframe of April 1, 2013 through March 31, 2014. The bid covered both secondary cable (600V) and medium voltage (15kV) power cable. At the March 20, 2014 Council Meeting, the Village Manager was authorized to extend the purchase order for 15kV primary cable with the Okonite Company and the purchase order for 600V secondary cable with Wesco through December 31, 2014.

Staff is requesting authorization to purchase additional quantities of secondary cable. This cable is used for street lights. The requested change order amount is \$2,380. The change order amount includes additional funds for manufacturing length tolerances and packaging as noted below.

600V Secondary Cable

Quantity 3-1/c #6: 1,500 ft.	Metals Escalation	Shipping Length Tolerance (5%) & Packaging	Requested Amount
\$2,266.50	\$0	\$113.33	\$2,379.83

↓
\$2,380

The Electric Fund FY 2014 Budget contains \$495,500 (account #500.42.31-660) for the purchase of cable. Prior to this request, the Village Council has previously approved \$346,965 of cable purchases from the 2014 budget.

Recommendation:

Consider authorizing the Village Manager to award a change order to Wesco in the amount of \$2,380 for the purchase of 600 volt secondary cable at the unit prices bid, subject to the contract conditions.



Agenda Item Executive Summary

Title: Village Green Flag Request

Presenter: Robert M. Bahan, Village Manager

Agenda Date: 08/19/2014

Consent: YES NO

- | | |
|--------------------------|-------------------------|
| <input type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | Resolution |
| <input type="checkbox"/> | Bid Authorization/Award |
| <input type="checkbox"/> | Policy Direction |
| <input type="checkbox"/> | Informational Only |

Item History:

August 20, 2013 Council Agenda Packet "Village Green Flag Request"

Executive Summary:

In 2008, a tradition began: planting 2,977 American flags on the Village Green to remember the victims of the September 11, 2011 terrorist attacks.

Attached is a letter from resident Elliott Tucker who is the student lead coordinating the continuation of this tradition. The Village has previously granted this same request since 2008. The flags will be planted on September 10 and removed on September 11, 2014 as described in the letter.

Recommendation:

Consider the request.

Attachments:

1) Tucker letter: "Request to plant flags on the Village Green"

From: Elliott Tucker
Date: July 24, 2014 at 3:12:48 PM CDT
To: <rbahan@winnetka.org>
Subject: Request to plant flags on the Village Green

Dear President Greable, Trustees and Manager Bahan:

Hi. In continuing the flag-planting tradition begun by Genevieve Nielsen in 2008, I am seeking permission to again plant 2,977 American flags on the Village Green at the base of the Cenotaph in remembrance of the victims of the 9/11 terrorist attacks. The flags would be planted during the late afternoon of September 10, 2014 and removed around sunset on September 11, 2014. This has become an annual, community-wide tradition, and I am honored to continue to coordinate the student-lead event.

Based upon feedback from past participants, this year we are upgrading from a 4"x6" flag to an 8"x12" flag for a sturdier, enhanced memorial. Thanks to the generous donations of local families and businesses, we were able to raise sufficient funds to cover the purchase of new American flags.

Thank you for your consideration.

Sincerely,

Elliott Tucker,
Winnetka Resident and New Trier High School student



Agenda Item Executive Summary

Title: Stormwater Monthly Summary Report

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date: 08/19/2014

Consent: YES NO

- | | |
|-------------------------------------|-------------------------|
| <input type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | Resolution |
| <input type="checkbox"/> | Bid Authorization/Award |
| <input type="checkbox"/> | Policy Direction |
| <input checked="" type="checkbox"/> | Informational Only |

Item History:

Monthly Report

Executive Summary:

The Village's Stormwater Project Manager has prepared a monthly report for the Village Council that brings together status, cost, and schedule information, for each separate stormwater project, in one place. The report consists of four documents, explained below:

AT Group Project Summary Report (Attachment #1)

This report provides a brief outline and summary of each major stormwater project currently being undertaken by the Village.

One Year Look-Ahead Schedule (Attachment #2)

This document provides an overview schedule for each project.

Program Budget (Attachment #3)

This report provides financial information for the stormwater and sanitary sewer improvement programs.

Program Organization Chart (Attachment #4)

This document presents a one-page "snapshot" view of the status of each project, and how each project fits into the overall stormwater and sanitary sewer management program.

Recommendation:

Informational report

Attachments:

1. AT Group Project Summary Report
2. One Year Look-Ahead Schedule
3. Program Budget
4. Program Organization Chart



MEMORANDUM

DATE: August 12, 2014
TO: Steven Saunders, P.E.
Village of Winnetka
SUBJECT: Project Summary

Active Projects

Spruce Outlet (Tower)

Activity Summary Copenhaver started construction and estimates that the work will be complete by September 15.

Budget Summary The Village budgeted \$90,000 for engineering and committed \$111,429, and budgeted \$1,000,000 for construction and committed \$1,087,465.

6-Month Look Ahead The project team will:
1. Complete project construction

Winnetka Avenue Pump Station

Activity Summary Construction of the Pump Station is complete and is operational. The contractor is working on site restoration.

Budget Summary The adjusted project budget is \$1,067,600, including engineering and construction.

6-Month Look Ahead The project team will:
1. Complete site restoration

NW Winnetka (Greenwood/Forest Glen)

Activity Summary The Metropolitan Water Reclamation District Board of Commissioners approved an Intergovernmental Agreement to fund \$2 million of the project costs on August 7, 2014, and the Village Council is scheduled to consider approval of this agreement on August 19, 2014. Comcast and AT&T have completed necessary utility relocation for the project and North Shore Gas is nearly complete with their required relocations. The project team conducted a final review of the plans and specifications and is awaiting MWRD comments on the plans.

The Village has received the signed Cook County Forest Preserve license agreement for the pond outlet. The plan is to publish to project for bid in August, to place the bid award on a September or October agenda for consideration, and proceed with construction. The tentative schedule includes shop drawing preparation, submittal and review from October thru December. Construction of the new outlet is planned for January 2015 with the storm sewer installation to follow.

Budget Summary The Village budgeted \$250,000 for engineering and committed \$226,874. The total project cost estimate – including the Forest Glen improvements - remains \$4,266,924.

6-Month Look Ahead The project team will:

1. Bid the project
2. Let the contract with Village Council approval
3. Construct the project

Willow Road Tunnel

Activity Summary MWH presented Review Point #1, at the June 24 Council meeting, and received approval to proceed with pre-engineering, water quality sampling and preparation of the permit application to present to the Council as Review Point #2 that is tentatively scheduled for January 2015.

Budget Summary The Village's agreement with MWH is now \$2,148,818. The total project cost estimate remains \$34,369,048.

6-Month Look Ahead The project team will:

1. Proceed with the Phase I preliminary engineering, additional water quality sampling
2. Present the Review Point #2 findings to the Village Council

Stormwater Utility Implementation

Activity Summary The project team and Municipal & Financial Services Group (MFSG) are proceeding with the implementation phase for a stormwater utility. The utility was implemented effective July 1 and bills have been mailed. The project team is responding to resident inquiries as needed.



Budget Summary The Council has awarded contracts to MFSG for study, implementation assistance, and call center support in the amount of \$186,316.

6-Month Look Ahead The project team will:
1. Continue implementation

Sanitary Sewer Evaluation

Activity Summary The Village awarded a sewer lining contract to address sanitary sewer deficiencies identified during the evaluation. The lining should be complete by the end of August. Staff is reviewing contract specifications for manhole repairs. The manhole repairs are scheduled for fall, 2014.

Budget Summary The Village has budgeted \$150,000 and committed \$152,157.

6-Month Look Ahead The project team will:
1. Complete design engineering of initial system improvements
2. Complete the improvements

Public Outreach

Activity Summary Staff continues to provide E-Winnetka updates on the multiple projects in the stormwater management program.

Budget Summary There is no separate budget associated with this project.

6-Month Look Ahead The project team will continue to update the website and monitor activity.

Ravine/Sheridan Road Improvements

Activity Summary IDOT is planning pavement and drainage improvements for the area. Due to the need for easement acquisition, the drainage project is scheduled in 2015.

Budget Summary This project is funded in its entirety by IDOT.

6-Month Look Ahead The project team will:



1. Monitor IDOT activities
2. Update the Council as needed

IKE Grant

Activity Summary The Villages of Winnetka, Glenview and Niles received an IKE Grant to identify stormwater management improvements to address localized problems in residential, multi-family, downtown and shopping center environments. The project team has completed the 1st round of open houses, and is scheduled to complete the 2nd round in August. The consultant is preparing the draft report. The draft report is scheduled for Council presentation in September.

Budget Summary This project is funded by an IKE Grant of \$200,000.

6-Month Look Ahead The project team will:

1. Complete the open houses
2. Prepare the draft project report
3. Complete the final project report

Ash Street Pump Station

Activity Summary CBBEL completed plans and specifications for the station, including pump and electrical equipment replacement. Staff also reviewed the project scope as part of the FY 14 budget. The project is proposed to be constructed using a design-build contract in 2014.

Budget Summary This project is funded within the Stormwater Fund Capital Budget.

6-Month Look Ahead The project team will:

1. Award the construction contract
2. Construct the project

Completed Projects



AT Group, Inc.

Stormwater Master Plan (SMP)

Activity Summary The Council adopted the plan at its April 17, 2014 meeting.

Budget Summary The Village budgeted \$50,000 and committed \$100,932.

Spruce Outlet (Lloyd)

Activity Summary The project is complete, and based on the recent storm events, is functioning as designed.

Budget Summary The Village expended \$37,143 for engineering and \$259,156 for construction. The total project cost estimate has been reduced from \$398,786 to \$296,299.

Attached are the following documents:

1. One-Year Look-Ahead Schedule including Council Meeting Presentations
2. Program Budget
3. Program Organization Chart

If you have any questions or need additional information, please call me at 847-691-9832, or send an e-mail to jjohnson@theatgrp.com.



**Village of Winnetka
Stormwater Management Program**

One-Year Look Ahead Schedule

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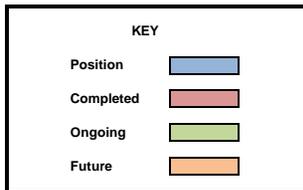
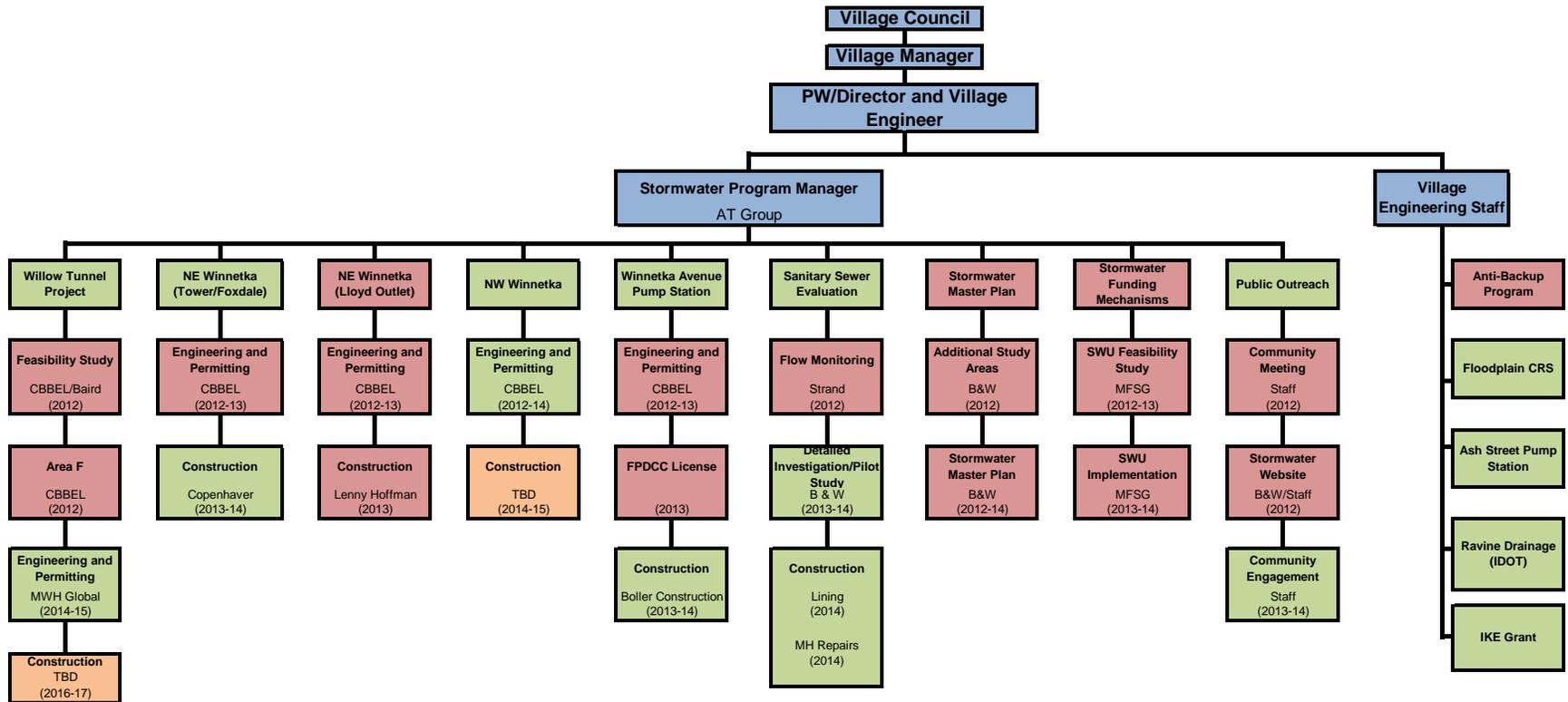
	Aug 14	Sep 14	Oct 14	Nov 14	Dec 14	Jan 15	Feb 15	Mar 15	Apr 15	May 15	Jun 15	Jul 15
Tower/Foxdale												
Construction												
Tunnel (Willow North, Willow South, Provident, Cherry Outlet, Underpass)												
Permitting/Preliminary Engineering												
NW Winnetka (Greenwood/Forest Glen)												
Bid Authorization/Bidding												
Construction												
Winnetka Avenue Pump Station												
Construction												
Sanitary Sewer												
Construction												
Community Outreach												
Council Meetings												
Stormwater Monthly Report												
Coal Tar Ban (Adopt)												
MWRD IGA												
IKE Grant Report/Approval												
Stormwater Monthly Report												
MWH Review Point #2												



Village of Winnetka
Stormwater Management Program Budget

Project	Initial Estimated Project Costs	Current Estimated Project Costs	2013/2014 Budget	Council Authorized	Spent	Comments
Stormwater Fund						
<u>58.75.640.601</u>						
Winnetka Ave. pump station	\$ 1,188,562	\$ 1,067,600	\$ 750,000	\$ 1,067,600	\$ 932,695	Council Award 9/17/13
Tower Road/Foxdale	\$ 1,419,544	\$ 1,087,465	\$ 1,000,000	\$ 1,087,465	\$ 878,314	Council Award 10/15/13
Lloyd Park/Spruce Street	\$ 601,030	\$ 296,299	\$ 414,000	\$ 296,299	\$ 296,299	Complete
NW Winnetka Greenwood/Forest Glen	\$ 2,880,887	\$ 4,266,924	\$ 4,040,000	\$ 226,874	\$ 224,729	Added Forest Glen and included utilities from different line item
Willow Rd tunnel Proposed Area F Permitting and Design	\$ 32,498,697	\$ 34,369,048	\$ 800,000	\$ 37,750 \$ 17,600 \$ 2,023,818	\$ 37,705 \$ 17,407 \$ 170,844	CBBEL October 2011 budget w/Kenny and Baird estimates MWH Global
Stormwater rate study	\$ 50,000	\$ 186,316	\$ 10,000	\$ 186,316	\$ 171,612	DPW 2011/12 Budget vs proposal. Additional fee for fifth workshop. Includes Implementation Phase Includes call center staffing
Stormwater master plan	\$ 50,000	\$ 100,932	\$ 60,000	\$ 100,932	\$ 100,932	Complete
Total Stormwater Costs	\$ 38,688,720	\$ 41,374,584	\$ 7,074,000	\$ 5,044,654	\$ 2,830,537	
Sanitary Sewer Fund						
<u>54.70.640.201</u>						
Sanitary Sewer Studies/Engineering	\$ 150,000	\$ 187,247	\$ 50,000	\$ 187,247	\$ 162,734	Includes initial system evaluation, some and dyed-water testing, and engineering
System I & I repairs	\$ 1,000,000	\$ 1,000,000	\$ 300,000	\$ -	\$ -	
Total Sanitary Sewer Costs	\$ 1,150,000	\$ 1,187,247	\$ 350,000	\$ 187,247	\$ 162,734	







Agenda Item Executive Summary

Title: Ordinance No. MC-6-2014: Reimbursement of Third Party and Professional Fees- Adopt

Presenter: Robert M. Bahan, Village Manager and Peter M. Friedman, Village Attorney

Agenda Date: 08/19/2014

- | | |
|-------------------------------------|-------------------------|
| <input checked="" type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | Resolution |
| <input type="checkbox"/> | Bid Authorization/Award |
| <input type="checkbox"/> | Policy Direction |
| <input type="checkbox"/> | Informational Only |

Consent: YES NO

Item History:

August 5, 2014 Regular Council meeting

Executive Summary:

The Village retains third party professionals, including engineers, lawyers, and planners, to perform services to assist the Village with its review and disposition of applications for Village action or decision, including requests for zoning relief. In these circumstances, the Village incurs fees and costs. This Ordinance sets forth a clear process by which the Village will receive reimbursement of its fees and costs from the applicants. Applicants would be required, before the Village performs any review, to deposit in an escrow account the estimated amount of the cost of third party and professional services required to review and act upon the application. Applicants would also be required to execute a short escrow agreement to govern the escrowed money. The Village would draw against the balance of the escrow account for reimbursement. If third party and professional fees exceed the estimate, the Village may require that an additional amount be deposited into escrow. If third party and professional fees are less than the estimate, the Village would return the balance to the applicant upon completion of the Village review and a final accounting.

This new process is particularly important in light of the Village Attorney organizational change from inside to outside counsel. Under the proposed Ordinance, Village Attorney fees on Village approvals and requests for zoning relief will be covered by the escrow deposit.

Recommendation:

We recommend approval of Ordinance No. MC-6-2014.

Attachments:

- 1) Memo re: Reimbursement of Professional Fees
- 2) Ordinance No. MC-6-2014

VILLAGE OF WINNETKA
M E M O R A N D U M

TO: Village Council

FROM: Robert M. Bahan, Village Manager
Peter M. Friedman, Village Attorney

CC: Megan E. Pierce, Assistant to the Village Manager

DATE: August 13, 2014

SUBJECT: Ordinance No. MC-6-2014, Reimbursement of Professional Fees

Background

The Village often must retain third party professionals, including engineers, lawyers, and planners, to perform services for the Village as part of its review and disposition of applications for Village action or decision on various matters, including requests for zoning relief. In these circumstances, the Village incurs fees and costs. These fees and costs, incurred because the Village must act in response to an application, should be borne by the applicant, not the Village. The current provisions of the Village Code regarding these circumstances requires updating to ensure a clear and fair process. The Village Manager identified the need to adopt a more effective process to assure that the Village is reimbursed for these third party and professional fees and costs.

This updated process is particularly important in light of the Village Attorney organizational change from inside to outside counsel. Under the proposed Ordinance, Village Attorney fees on Village approvals and requests for zoning relief will be covered by the escrow deposit.

Progress Update

In consultation with the Village Manager, the Village Attorney drafted Ordinance No. MC-6-2014 to amend Title 2 of the Winnetka Village Code, adding a new Chapter 2.76. This new Chapter sets forth a process by which the Village will receive reimbursement of third party professional fees and costs from applicants seeking Village action or decision, including requests for zoning relief.

Applicants will be required, before Village staff performs its review, to deposit in an escrow account the estimated amount of third party professional costs required to review and act upon the application. The Applicant will also be required to execute a short escrow agreement to govern the escrowed money. With regard to attorney fees, the estimated cost will be based upon the reimbursement rates established by the Village Council in its annual fee resolution. The Village would draw against the escrow balance to receive reimbursement. If actual third party and professional fees incurred exceed the initial estimate, the Village will estimate the amount of

additional required fees and the Applicant will then make the additional escrow deposit. After the Village completes its review, it will perform a final accounting of the total amount of third party and professional fees incurred and the total amount of the Applicant's escrow deposits. If the total amount of third party fees exceeds the total amount deposited into escrow, the Village may require the applicant to deposit an additional amount. If the total amount of third party fees is less than the total amount deposited into escrow, the Village will return the balance to the Applicant.

The Ordinance was introduced at the August 5, 2014 Regular Council meeting.

Recommendation

We recommend that the Village Council approve Ordinance No. MC-6-2014.

Attachments

- Ordinance No. MC-6-2014.

**AN ORDINANCE
AMENDING TITLE 2 OF THE WINNETKA VILLAGE CODE
REGARDING REIMBURSEMENT OF THIRD PARTY AND PROFESSIONAL
FEES AND COSTS INCURRED BY THE VILLAGE
DURING REVIEW OF APPLICATIONS FOR VILLAGE ACTION**

WHEREAS, the Village of Winnetka is a home rule municipality in accordance with Article VII, Section 6 of the Constitution of the State of Illinois of 1970 and has the authority to exercise any power and perform any function pertaining to its government and affairs; and

WHEREAS, Chapter 15 of the Winnetka Village Code, as amended ("*Village Code*"), titled "Buildings and Construction," sets forth certain regulations governing the issuance of permits and other approvals necessary for real estate development and construction within the Village ("*Development Approvals*"); and

WHEREAS, Section 15.32.02 of the Village Code provides, among other things, that: (i) the Village Council shall establish, by resolution, all fees, costs, deposits, and bonding requirements for obtaining Development Approvals (collectively, "*Development Fees and Costs*"); and (ii) the owner of property seeking Development Approvals is responsible for the payment of all Development Fees and Costs, including the costs incurred by the Village for third party and professional services retained by the Village in connection with the Village's review of the owner's application for Development Approvals; and

WHEREAS, Title 2 of the Village Code, titled "Administration and Personnel," sets forth various regulations regarding the administration of Village affairs; and

WHEREAS, the Village desires to update and clarify the process for receiving reimbursement of Development Fees and Costs and other costs incurred by the Village for third party and professional services retained by the Village in connection with the Village's review of applications for Village action or decision on any matter ("*Reimbursement Regulations*"); and

WHEREAS, the Village Council has determined that amending Title 2 of the Village Code to add a new Chapter 2.76 adopting Reimbursement Regulations as set forth in this Ordinance is in the best interests of the Village;

NOW, THEREFORE, be it ordained by the President and Board of Trustees of the Village of Winnetka as follows:

SECTION 1: The foregoing recitals are hereby incorporated as the findings of the Council of the Village of Winnetka, as if fully set forth in this Section.

SECTION 2: Title 2, titled "Administration and Personnel," of the Village Code is hereby amended by adding a new Chapter 2.76, titled "Third Party Fees and Escrow of Funds," which new Chapter 2.76 will read as follows:

Chapter 2.76
THIRD PARTY FEES AND ESCROW OF FUNDS

Section 2.76.010 Purpose.

The general purposes of this chapter are to require persons or other legal entities who apply to or petition the Village for consideration or review of, or action on, any matter requiring Village approval to: (a) reimburse the Village for certain third party and professional fees incurred by the Village as a result of the application or petition, and (b) deposit the funds necessary to reimburse the Village before the Village incurs any third party or professional fees as a result of the application or petition.

Section 2.76.020 Responsibility for third party fees.

Any person or other legal entity who applies to or petitions the Village for consideration or review of, or action on, any matter requiring Village approval shall be responsible for any third party and professional fees, including without limitation engineering fees, planning fees, and legal fees, incurred by the Village during its review of, and any action in response to, the application or petition.

Section 2.76.030 Amount of fees.

The Village Council shall establish by resolution the rates at which third party and professional fees shall be reimbursed to the Village pursuant to this chapter.

Section 2.76.040 Estimate of costs and establishment of escrow.

A. Upon receipt of any application or petition for Village consideration, review, or action, including, without limitation, approvals required under the Winnetka Zoning Ordinance, that will require the Village to obtain third party or professional services, the Village Manager, or the Manager's designee, shall estimate the cost of the third party and professional services based upon the nature and complexity of the required services, the rates established by the Village Council for reimbursement of third party and professional fees, and any other factors that may be relevant to estimating the cost of the required third party and professional services. The Village Manager or designee shall send written notice to the applicant or petitioner of the estimated cost of third party and professional services and shall require the applicant or petitioner to: (1) execute an escrow agreement in a form to be provided by the Village Manager, and (ii) deposit the estimated amount with the Village within 14 days of receipt of the notice. The Village will not be required to take any official action on the application or petition before the applicant or petitioner executes and delivers the escrow agreement and makes the required escrow deposit.

B. Upon receipt of the executed escrow agreement and the amount equal to the estimated cost of the required third party and professional services, the Village Manager, or the Manager's designee, shall deposit this amount into a separate escrow account established to defray the cost of third party and professional fees incurred by the Village during its review of, and any action in response to, the application or petition. No interest shall be payable on any funds deposited in the escrow account.

Section 2.76.050 Withdrawals from escrow.

A. The Village Manager, or the Manager's designee, shall require the third parties and professionals the Village engages in connection with the review of, and any action in response to, any application or petition to keep reasonably detailed records of their services performed and to invoice the Village no less frequently than monthly.

B. The Village shall draw on the funds deposited in the escrow account to pay, at the rates established by the Village Council, the invoices for third party and professional services rendered in connection with the review of, and any action in response to, the application or petition. The Village Manager shall approve all draws from the escrow account, keep a written record of the draws, and send a written record of all draws to the applicant.

C. The Village Manager, or the Manager's designee, shall monitor the balance of funds on deposit in the escrow account to assure that sufficient funds are available to defray the cost of all third party and professional services performed in connection with the review of, and any action in response to, the application or petition. If, at any time, the Village Manager determines that sufficient funds are not available, the Village Manager shall estimate the cost of the foreseeable remaining required third party and professional services and send written notice to the applicant or petitioner requiring an additional amount to be deposited in the escrow account within 14 days after receipt of the notice, all in accordance with the escrow agreement and the process set forth in Section 2.76.040. The Village Manager may instruct the third parties and professionals engaged in connection with the review of, and any action in response to, the application or petition to cease performing further services until the additional amount requested has been deposited into the escrow account.

Section 2.76.060 Closing of escrow.

A. After all third party and professional services required for the review of, and any action in response to, the application or request have been completed, the Village Manager shall perform a final accounting of the deposits made into the escrow account and the actual cost of the third party and professional fees incurred. The Village Manager shall promptly provide a written copy of this accounting to the applicant or petitioner.

B. If the amount deposited in the escrow account is insufficient to pay for the actual third party and professional fees incurred by the Village for the review of, and any action in response to, the application or petition, the Village Manager shall provide the applicant or petitioner with written notice and require payment of the balance due.

C. If, after the payment of all actual third party and professional fees incurred for the review of, and any action in response to, the application or petition, the Village Manager shall promptly return any remaining balance to the applicant or petitioner. If the Village Manager is unable to return the balance held in the escrow account to the applicant or petitioner 30 days after sending written notice of any balance to the applicant or petitioner, the Village Manager shall be entitled to charge the applicant or petitioner an administrative fee of \$50.00 per month, and to draw upon the escrow account for the payment of the fee, until the applicant or petitioner recovers the balance or the balance is exhausted. If the applicant or petitioner does not recover the remaining balance held in the escrow account two years after the Village Manager sent the applicant or petitioner written notice, the Village Manager will be entitled to transfer the balance from the escrow account to the Village general fund."

SECTION 3: This Ordinance is passed by the Council of the Village of Winnetka in the exercise of its home rule powers pursuant to Section 6 of Article VII of the Illinois Constitution of 1970.

SECTION 4: This Ordinance shall take effect immediately upon its passage, approval, and posting as provided by law.

[SIGNATURE PAGE FOLLOWS]

PASSED this ____ day of _____, 2014, pursuant to the following roll call vote:

AYES: _____

NAYS: _____

ABSENT: _____

APPROVED this ____ day of _____, 2014.

Signed:

Village President

Countersigned:

Village Clerk

Published by authority of the
President and Board of Trustees
of the Village of Winnetka,
Illinois, this ____ day of August,
2014.

Introduced: August 5, 2014

Passed and Approved: _____, 2014

Submitted to State of Illinois for posting: _____, 2014



Agenda Item Executive Summary

Title: Ordinance No. MC-7-2014: Implementing a Ban on Coal Tar-Based Pavement Sealants- Adopt

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date: 08/19/2014

Consent: YES NO

- | | |
|-------------------------------------|-------------------------|
| <input checked="" type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | Resolution |
| <input type="checkbox"/> | Bid Authorization/Award |
| <input type="checkbox"/> | Policy Direction |
| <input type="checkbox"/> | Informational Only |

Item History:

April 8, 2014 Council Study Session
July 8, 2014 Council Study Session
August 5, 2014 Council Meeting

Executive Summary:

During the review of the Stormwater Master Plan and related stormwater improvement projects, a ban on the use of coal tar sealants as a potential local environmental regulation was discussed. Coal tar is a waste material generated in the conversion of coal to coke. Manufacturers choose coal tar for sealants because of its resistance to petroleum products like gasoline and oil, which drip from cars and deteriorate asphalt surfaces. In time, sunlight and vehicle traffic wears down sealcoating, and sealcoat flakes are washed away by rain or carried away by wind. The Village Council reviewed information and research provided by staff on the nature and use of coal tar at the April 8, 2014 Study Session, where the Council ultimately directed the Winnetka Environmental & Forestry Commission (WEFC) to study the matter and report back to the Village Council.

The WEFC met on four occasions in April, May, and June of 2014 to study and discuss the issue, and at the July 8, 2014 Study Session the WEFC recommended that the Village Council consider banning the use of coal tar-based sealers in the Village of Winnetka. The WEFC recommended implementing the ban by requiring commercial applicators to obtain a license to apply pavement sealant products, and to sign an affidavit not to apply coal tar-based sealant materials. The WEFC also recommended that the Village engage in a robust education effort to make residents and contractors aware of the ban, and communicate the reasons for banning the material.

The Village Council discussed the matter and concurred with the WEFC's recommendation, however the Council wished to make the ban more general, noting that the licensing approach would not apply to residents applying the material to their own driveways. Pursuant to Council direction, staff has prepared an Ordinance that would implement a general ban on coal tar-based pavement sealants. Ordinance No. MC-7-2014 modifies the Village Code to require licensing of commercial sealant applicators and to include coal tar-based sealants in the definition of public nuisances. The Council introduced Ordinance MC-7-2014 at the August 5, 2014 Council meeting.

At the August 5 meeting, the Council requested that speakers could offer additional information for consideration. Attachment #3 was received from the Pavement Coatings Technology Council (PCTC); the PCTC has also requested time before the Council to present and answer questions. Attachment #4 was received from Coal Tar Free America. These materials have not been reviewed by Staff, but are included as information for the Council's process.

Recommendation:

Consider adoption of Ordinance No. MC-7-2014, implementing a ban on coal tar-based pavement sealants.

Attachments:

1. Agenda Report
2. Ordinance No. MC-7-2014
3. Pavement Coatings Technology Council Information Submittal
4. Coal Tar Free America Information Submittal

Agenda Report

Subject: MC-7-2014: Implementing a Ban on Coal Tar-Based Pavement Sealants

Prepared By: Steven M. Saunders, Director of Public Works/Village Engineer

Date: August 13, 2014

Ref: April 8, 2014 Council Study Session
July 8, 2014 Council Study Session
August 5, 2014 Council Meeting

Background

During the review of the Stormwater Master Plan and related stormwater improvement projects, a ban on the use of coal tar sealants as a potential local environmental regulation was discussed. Sealants are used on asphalt driveways and parking lots as a means of protecting the asphalt surface from weathering. Generally, sealcoats come in two basic varieties: coal tar-based and asphalt-based. Coal tar-based sealants are more resilient, but contain much higher levels of a class of chemical compounds known as polycyclic aromatic hydrocarbons (PAH), some of which can harm fish, and with prolonged exposure, pose a risk of cancer in humans. The asphalt based products contain significantly less PAH's than coal tar-based sealants. An Austin, Texas study determined that sealcoat products based in coal tar contained up to 1,000 times more PAH's than asphalt-based products.

Coal tar is a waste material generated in the conversion of coal to coke. Manufacturers choose coal tar for sealants because of its resistance to petroleum products like gasoline and oil, which drip from cars and deteriorate asphalt surfaces. In time, sunlight and vehicle traffic wear down sealcoating, and sealcoat flakes are washed away by rain or carried away by wind. The Village Council reviewed information and research provided by staff on the nature and use of coal tar at the April 8, 2014 Study Session, where the Council ultimately directed the Winnetka Environmental & Forestry Commission (WEFC) to study the matter and report back to the Village Council.

The WEFC met on four occasions in April, May, and June of 2014 to study and discuss the issue, and at the July 8, 2014 Study Session the WEFC recommended that the Village Council consider banning the use of coal tar-based sealers in the Village of Winnetka. The WEFC recommended implementing the ban by requiring commercial applicators to obtain a license to apply pavement sealant products, and to sign an affidavit not to apply coal tar-based sealant materials. The WEFC also recommended that the Village engage in a robust education effort to make residents and contractors aware of the ban, and communicate the reasons for banning the material.

The Village Council discussed the matter and concurred with the WEFC's recommendation, however the Council wished to make the ban more general, noting that the licensing approach would not apply to residents applying the material to their own driveways. Pursuant to Council direction, staff has prepared an Ordinance that would implement a pavement sealant applicator license program along with a general ban on coal tar-based pavement sealants. Ordinance MC-7-2014 (**Attachment #1**) modifies the Village Code as follows:

Add Chapter 74 in Title 5:

5.74. Pavement Sealant Applicators.

*A. License. No person shall apply pavement or pavement sealing products ("**Sealant**") to any public or private property within the Village without a license ("**Pavement Sealant License**"), which License shall be renewed annually. A Pavement Sealant License shall not be required for a property owner applying Sealant to pavement on a single-family lot owned by the property owner. Application for a Pavement Sealant License shall be on a form provided by the Village and shall, at a minimum, state the name, address, and contact information of the person applying for the License and the person or persons who will be applying the Sealant, and such other information as may be required by the Village Manager.*

*B. Certification; Previous Services. All persons applying for a Pavement Sealant License shall (i) sign a certification on a form provided by the Village, certifying, at a minimum, that neither the licensee nor any person acting under the License will apply products that contain coal tar, coal tar derivatives, or coal tar mixtures ("**Coal Tar Products**") to any public or private property within the Village, and (ii) upon the Village's request, provide a written list of locations where the licensee or any person acting under the licensee has provided applied Sealant to any public or private property within the Village within the preceding 365 days.*

C. Fee. All applications for a Pavement Sealant License shall be accompanied by the annual license fee, which shall be set from time to time by resolution of the Village Council.

D. Review and Approval. The Director of Public Works shall review all applications for Pavement Sealant Licenses and shall make a recommendation to the Village Manager for each application. The Village Manager shall grant a Pavement Sealant License if the application complies with all applicable provisions of this Chapter and the Village Code.

A new number 17 in Section 9.16.020 B:

*17. The application after [insert effective date] of pavement or pavement sealing products that contain coal tar, coal tar derivatives, or coal tar mixtures ("**Coal Tar Products**") to any public or private property within the Village. Abatement of this nuisance shall consist, at a minimum, of sealing over the Coal Tar Products with an asphalt-based product free of coal tar.*

The proposed language retains the recommended licensing for commercial applicators and expands the Village Code language on Public Nuisances to include coal tar-based sealers. If the Village Council ultimately adopts MC-7-2014, staff proposes to focus very heavily on education during the remainder of the 2014 pavement season. Education will include contacting pavement sealer applicators, e-Winnetka updates, using the Village's website, the Winnetka Report, and other means. During the 2015 construction season, staff will conduct a data gathering effort using refuse collectors to identify the number of driveways being sealed during the year. Property owners will be contacted for a follow-up survey to determine whether the sealant was self-applied or a commercial applicator was used, whether the property owner is aware of the ban, and whether the material applied was asphalt-based or coal tar-based. Data would be used to evaluate the effectiveness of public education and to refine enforcement procedures for coming years.

Enforceable licensing requirements for commercial applicators would be implemented for the 2015 construction season, and enforcement for commercial applicators will be related to whether or not an applicator possesses a license. For residential property owners who self-perform sealant application, staff anticipates that enforcement would begin in the 2015 construction season and focus primarily on issuances of warnings combined with educational materials for the first year, to be fine-tuned based on data-gathering from the 2015 season.

The Village Council introduced Ordinance MC-7-2014 at the August 5, 2014 Council meeting.

Recommendation:

Consider adoption of Ordinance MC-7-2014 implementing a ban on coal tar-based pavement sealants.

Attachments:

1. Ordinance MC-7-2014

**AN ORDINANCE
AMENDING TITLE 5 AND SECTION 9.16.020
OF THE WINNETKA VILLAGE CODE REGARDING A BAN ON COAL TAR
PRODUCTS AND THE APPLICATION OF PAVEMENT
SEALANTS WITHIN THE VILLAGE**

WHEREAS, the Village of Winnetka is a home rule municipality in accordance with Article VII, Section 6 of the Constitution of the State of Illinois of 1970 and has the authority to exercise any power and perform any function pertaining to its government and affairs; and

WHEREAS, Title 5 of the Winnetka Village Code, as amended ("*Village Code*"), titled "Business Licenses and Regulations," sets forth certain regulations governing the licensing and operation of businesses within the Village ("*Business Regulations*"); and

WHEREAS, Section 9.16.020 of the Village Code, titled "Public nuisances defined," identifies certain activities that, when conducted within the Village, are deemed to be public nuisances punishable by certain penalties and that must be abated ("*Nuisance Regulations*"); and

WHEREAS, the Village desires to update: (i) the Business Regulations to require all persons engaged in the business of applying pavement sealing products to public or private property within the Village to obtain a Village license; and (ii) the Nuisance Regulations to declare a public nuisance the application of any pavement sealing product that contains coal tar, coal tar derivatives, or coal tar mixtures to any public or private property within the Village; and

WHEREAS, the Village Council has determined that amending the Business Regulations and the Nuisance Regulations as set forth in this Ordinance is in the best interests of the Village;

NOW, THEREFORE, be it ordained by the President and Board of Trustees of the Village of Winnetka as follows:

SECTION 1: The foregoing recitals are hereby incorporated as the findings of the Council of the Village of Winnetka, as if fully set forth herein.

SECTION 2: Title 5, titled "Business Licenses and Regulations," of the Village Code is hereby amended by adding a new Chapter 5.74, titled "Pavement Sealant Applicators," which new Chapter will read as follows:

Chapter 5.74
PAVEMENT SEALANT APPLICATORS

Section 5.74.010 License.

No person shall apply pavement or pavement sealing products ("Sealant") to any public or private property within the Village without a license ("Pavement Sealant License"), which License shall be renewed annually. A Pavement Sealant License shall not be required for a property owner applying Sealant to pavement on a single-family lot owned by the property owner. Application for a Pavement Sealant License shall be on a form provided by the Village and shall, at a minimum, state the name, address, and contact information of the person applying for the License and the person or persons who will be applying the Sealant, and such other information as may be required by the Village Manager.

Section 5.74.020 Certification; previous services.

All persons applying for a Pavement Sealant License shall (i) sign a certification on a form provided by the Village, certifying, at a minimum, that neither the licensee nor any person acting under the License will apply products that contain coal tar, coal tar derivatives, or coal tar mixtures ("Coal Tar Products") to any public or private property within the Village, and (ii) upon the Village's request, provide a written list of locations where the licensee or any person acting under the license has applied Sealant to any public or private property within the Village within the preceding 365 days.

Section 5.74.030 Fee.

All applications for a Pavement Sealant License shall be accompanied by the annual license fee, which shall be set from time to time by resolution of the Village Council.

Section 5.74.040 Review and approval.

The Director of Public Works shall review all applications for Pavement Sealant Licenses and shall make a recommendation to the Village Manager for each application. The Village Manager shall grant a Pavement Sealant License if the application complies with all applicable provisions of this Chapter and the Village Code.

SECTION 3: Subsection B, titled "Pubic Nuisances Affecting Health," of Section 9.16.020, titled "Public nuisances defined," of Chapter 9.16, titled "Nuisances," of Title 9, titled "Public Peace, Morals and Welfare," of the Village Code is hereby amended by amending a new Paragraph 17, which new Paragraph will read as follows:

17. The application after _____, 2014, being the effective date of this Paragraph, of pavement or pavement sealing products that contain coal tar, coal tar derivatives, or coal tar mixtures ("**Coal Tar Products**") to any public or private property within the Village. Abatement of this nuisance shall consist, at a minimum, of sealing over the Coal Tar Products with an asphalt-based product free of coal tar.

SECTION 4: This Ordinance is passed by the Council of the Village of Winnetka in the exercise of its home rule powers pursuant to Section 6 of Article VII of the Illinois Constitution of 1970.

SECTION 5: This Ordinance shall take effect immediately upon its passage, approval, and posting as provided by law.

PASSED this ____ day of _____, 2014, pursuant to the following roll call vote:

AYES: _____

NAYS: _____

ABSENT: _____

APPROVED this ____ day of _____, 2014.

Signed:

Village President

Countersigned:

Village Clerk

Published by authority of the President and Board of Trustees of the Village of Winnetka, Illinois, this ____ day of _____, 2014.

Introduced: August 5, 2014

Passed and Approved: _____, 2014

Submitted to State of Illinois for posting: _____, 2014

ATTACHMENT #3
PAVEMENT COATINGS TECHNOLOGY COUNCIL:
INFORMATION SUBMITTAL



AGENDA PACKET
INFORMATION ABOUT REFINED TAR-BASED PAVEMENT SEALANTS (RTS)
FOR
VILLAGE OF WINNETKA, ILLINOIS
REGULAR VILLAGE COUNCIL MEETING

AUGUST 19, 2014

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CONTRARY TO THE CLAIMS OF ALARMISTS, RTS IS ALREADY APPROPRIATELY REGULATED
Pavement Maintenance & Reconstruction Magazine
(<http://www.forconstructionpros.com/pavement-maintenance>)

By A. LeHuray

7/28/2014

2014 Column #6 to appear in Next Issue (editorial adjustments not yet made)

The “How Laws are Made in Minnesota” series is not yet complete but I’m interrupting the Minnesota series to explain some of the laws and regulations that apply to coal tar and distillation fractions such as RT-12, the ingredient used in the manufacture of RTS, and how alarmists use misleading tactics to convince the unwary that regulations are inadequate.

Environmental activist groups that agitate for regulation of RTS and other substances are making the claim that the USEPA and other agencies are not doing an adequate job of regulating chemicals in products. Many of these groups want the government to regulate on the basis of hazard rather than risk. In the world of regulation, the word “hazard” has a specific meaning, referring to an inherent property of a substance that, in certain circumstances can be dangerous. Water, for example, is a drowning hazard, can make you sick if ingested in excess, and can be really dangerous when frozen. Take a look at [this](#) website about dihydrogen monoxide – the chemical name for water. The website authors use language to describe facts about water that make it sound scarily dangerous, so much so that the government seems negligent for allowing it to be so unregulated.

The same type of fear-mongering tactics are used by the advocates of RTS bans. In presentations, writings and web sites, USGS staff scientists and their followers never fail to point out hazard listings of coal tar without mentioning the circumstance in which the hazard may be associated with an actual risk that needs to be managed– that is, high temperature industrial settings. . It is appropriate to question the USGS when they claim that they are not engaged in advocacy because, in the case of RTS, the USGS is aligned with the most extreme anti-chemical activists in using hazard listings, regulations based on hazard listings such as OSHA’s Hazard Communications (HazCom) rules and manipulated exposure circumstances as tools to communicate unwarranted alarm.

Regulation of chemicals in the US is comprehensive with dozens of overlapping programs at the federal level alone. Those that most visibly impact RTS include OSHA’s HazCom which require disclosure of hazards via MSDS and the labels that comes with sealants of all varieties. Of course, OSHA’s comprehensive worker health and safety regulations also apply to sealant from manufacture to application.

Refined tar- and asphalt-based emulsions are both mixtures of ingredients, which means the ingredients are individually regulated by EPA via the Toxic Substances Control Act (TSCA). EPA also administers the Resource Conservation and Recovery Act (RCRA) which regulates waste materials from cradle to grave. RCRA exempts coke oven byproduct materials that are recycled to the “tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar’s sale or refining” from hazardous waste regulation because refined coal tar does not exhibit any of the toxicity characteristics used by RCRA to identify hazardous wastes.

CONTRARY TO THE CLAIMS OF ALARMISTS, RTS IS ALREADY APPROPRIATELY REGULATED

2014 Column #6

p. 2

In addition to the coal tar generated as a coke oven byproduct, coal tars were produced during the now-defunct process of manufacturing gas from coal for use as a source of energy in municipalities across North America. Hundreds of former gas plants (MGP) around the country are listed as “hazardous waste sites,” not because of the coal tar but because of substances mixed in with the coal tar that do have toxicity characteristics. EPA and the courts have issued opinions that, unless a material displays toxicity characteristics because other substances are present, “MGP remediation wastes [that is, coal tar] are unlikely to be RCRA hazardous waste under the federal program, and would not be required to meet RCRA requirements, including Land Disposal Restriction requirements.”

RT-12 has been tested and does not meet the RCRA hazardous waste criteria. RTS also passes EPA’s toxicity characteristic test, indicating that RTS does not meet the criteria to be a hazardous waste and disposal in non-hazardous waste landfills is appropriate.

Coal tar and fractional distillates of coal tar are specifically designated “Generally Recognized as Safe and Effective” in FDA regulations for use in over-the-counter skin medications. FDA’s Cosmetic Ingredient Review process has, however, not approved use of coal tar in cosmetics, so today you won’t find the coal tar eye liner that was used in the distant past.

So even if RTS were an important source of PAHs in storm water detention pond sediments – which science has shown to be unlikely in Minnesota - the MN Pollution Control Agency’s claim that the sediment must be disposed in hazardous waste landfills because of the use of RTS would not be the case if Minnesota were to follow federal standards.

The goal of regulation is to promote the health and safety of the public and the environment. In the case of pavement sealers, federal regulations have been shown to be effective at achieving these goals.



Frequently Asked Questions

ASPHALT PARKING LOTS ARE CAPITAL INVESTMENTS

Asphalt parking lots and driveways are capital investments, increasing the value and functionality of a property. Like any infrastructure investment, the asphalt surface must be maintained to keep both value and functionality over time.

WHAT ARE THE MAINTENANCE OPTIONS?

Maintenance options include resurfacing or replacing the asphalt periodically and extending the service life of the asphalt by sealcoating.

WHAT DOES SEALCOATING DO?

Sealcoating extends the useful life of the capital asset – an asphalt parking lot – by protecting the pavement from the natural aging process caused by sunlight, water and debris. Sealcoat also protects pavement from degradation caused by leaking oil and gasoline and other caustic products. An added benefit is that sealcoating adds to the “curb appeal” of a paved surface, giving it a clean, uniform look.

WHAT ARE THE OPTIONS FOR SEALCOATING?

There are two essential options for sealcoating: refined coal tar-based sealers and asphalt-based sealers. Other options are cost-prohibitive for most applications.

WHERE DOES THE BASE MATERIAL FOR SEALERS COME FROM?

Refined coal tar-based sealers are based on a selectively refined fraction of crude coke oven tar, which is a byproduct of the steel making process. Similarly, asphalt-based sealers are based on a selectively refined fraction of crude oil.

HOW ARE PAVEMENT SEALERS MADE?

The majority of pavement sealers are an emulsion, a mixture typically consisting of water, clay, sand, polymers and usually less than 20% of either asphalt or refined coal tar.

HOW LONG HAVE PAVEMENT SEALERS BEEN IN EXISTENCE?

Pavement sealers have been applied for over six decades. Sealing is a tried and true way to protect and beautify a pavement, prolonging its useful life and minimizing the need to replace the asphalt, which consumes a lot of energy (fuel to manufacture, deliver and install) and natural resources.

MOST SEALER MANUFACTURERS SELL BOTH TYPES OF SEALER, SO WHY DO THEY CARE WHICH ONE IS USED?

Most sealer manufacturers make both refined coal tar-based products and asphalt-based products. Even though most sealer manufacturers make both, most recommend refined coal-tar based for most applications because the superior performance of tar-based sealcoat allows the manufacturers to stand behind the performance of their products, enhancing the reputations of their businesses. Research and development projects continue to improve the performance of asphalt-based sealer, but there remains a way to go.

WHY REFINED COAL TAR-BASED SEALER?

Refined coal tar-based sealers (1) protect the underlying asphalt pavement from leaking oil and gas spills, (2) last longer than asphalt-based sealer, (3) are more resistant to natural aging processes caused by exposure to the elements (sun, rain, freeze-thaw, etc.), (4) adhere (that is, "sticks") to the underlying pavement better, and (5) are manufactured to a performance-based specification (ASTM@ D490).

WHAT IS THE PERFORMANCE DIFFERENCE BETWEEN TYPES OF SEALERS?

Asphalt-based sealers have many of the same beneficial properties as refined coal tar-based sealers. The tar-based product, however, is superior in strength, resistance to leaks/spills of petroleum products, UV bleaching and road salts.

WHAT IS REFINED COAL TAR?

One of the byproducts of manufacturing steel in coking ovens is coal tar. Out of the coking oven, this material is "crude coal tar" which, like "crude oil," serves as a raw material that is distilled into many different fractions in coal tar refineries. The different fractions are then used to make many different products.

ARE PAVEMENT SEALERS HAZARDOUS?

Air sampling studies showed refined coal tar based sealers pose no inhalation risk to applicators, manufacturers or the general public. People with skin conditions have been applying coal tar creams and lotions (not pavement sealers, but still, a coal tar-based product) directly to their skins on purpose for a century or more with few reported problems. Research with insurance carriers (both in liability and workers compensation) shows a general paucity of insurance claims over the history of sealer use.

WHAT PRECAUTIONS SHOULD BE TAKEN WHEN APPLYING RTS EMULSIONS?

If RTS emulsions contact skin during application in the presence of sunlight, they can irritate the skin



and applicators can experience moderate to severe “sunburn” effects if they do not wear appropriate clothing including long sleeve shirts, long pants and work gloves. Depending on the method of application and weather conditions a hat and face shield may be appropriate. Protective creams are available to minimize skin contact with sealer and to block the sun’s ultraviolet rays that can enhance skin irritation. When proper handling and personal hygiene precautions are observed skin irritation should not be a significant problem.

DO REFINED COAL TAR-BASED SEALERS CAUSE CANCER?

Some activists say that refined tar-based sealers are a health threat, but across the two, three and four generation memories of the many family-owned companies in the business of making or applying sealcoat, there are no reports of adverse chronic health effects – including cancer - that can be attributed to exposure to sealcoat.

DO OTHER PRODUCTS MADE FROM REFINED COAL TAR CAUSE CANCER?

Expanding the search for evidence of cancer to other products made from refined tar, every day millions of people world-wide use coal tar soaps, shampoos and creams approved for use as over-the-counter medicines to treat skin disorders such as eczema, psoriasis and dandruff. Coal tar and coal tar derivatives are listed by the US Food and Drug Administration (FDA) as “generally recognized as safe and effective” active ingredients for use to treat these skin ailments with coal tar concentrations up to 5% in over-the-counter products. Because of its use in medicines, many studies have been performed over nearly a century to see if the patients who intentionally expose themselves to high level doses of coal tar for long periods of time have increased risk of cancer. All the studies have reached the same conclusion – there is no evidence of cancer.

WHAT DO STUDIES OF PEOPLE EXPOSED TO NON-PHARMACEUTICAL COAL TAR SHOW?

Studies of humans exposed to coal tar (other than via medicinal coal tar products) can be summarized as follows:

- There is no evidence that low level or intermittent exposure to coal tar or coal tar pitch has caused cancer in humans. This category describes exposures to refined coal tar-based sealer.
- There is little evidence that high level, repeated exposures has caused cancer in humans. This evidence is largely reports from the past, such as chimney sweeps in London in the 18th century (but not chimney sweeps in other countries at about the same time) and late 19th – early 20th century factories, at a time when industrial hygiene practices were virtually non-existent. The working conditions described in these reports include exposures to many chemicals in addition to coke and coal tar.
- There are some studies conducted in modern factories with high temperature (1000s of degrees



Fahrenheit) industrial processes such as aluminum smelting or coke oven gases that show some adverse effects.

I'VE HEARD THAT COAL TAR IS LISTED AS A "KNOWN CARCINOGEN." WHAT ABOUT THAT?

Because of the observations discussed in the previous paragraph, occupational exposures to coal tar and coal tar pitch in high temperature industrial settings have been listed as carcinogens by the International Agency for Research on Cancer (IARC). The listing is specifically for those very high temperature occupational settings, and is NOT for intermittent, incidental low to moderate temperature exposures such as might be associated with pavement sealer.

Similar to health agencies elsewhere in the world, the US FDA lists coal tar as "generally recognized as safe and effective" for sale as an over-the-counter (no prescription needed) skin medication. The FDA has found no evidence that coal tar causes cancer.

As discussed later on, there is a conflict between regulations based on actual human exposures to coal tar and those based on exposures of laboratory animals to laboratory-made compounds, for example in some states such as Minnesota.

IS COAL TAR REGULATED AS A HAZARDOUS SOLID WASTE IN THE US?

In the US, the Resource Conservation and Recovery Act (RCRA) regulates waste materials "from cradle to grave." RCRA exempts coke oven byproduct materials that are recycled to the "tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining" from hazardous waste regulation because refined coal tar does not exhibit any of the toxicity characteristics used by RCRA to identify hazardous wastes.

In addition to the coal tar generated as a coke oven byproduct, coal tars were produced during the now-defunct process of manufacturing gas from coal for use as a source of energy in municipalities across the North American continent. Hundreds of former manufactured gas plants (MGP) around the country are listed as "hazardous waste sites," not because of the coal tar but because of substances mixed in with the coal tar that do have toxicity characteristics. The US EPA and federal courts have issued opinions that, unless a material displays toxicity characteristics because other substances are present, "MGP remediation wastes [that is, coal tar] are unlikely to be RCRA hazardous waste under the federal program, and would not be required to meet RCRA requirements, including Land Disposal Restriction requirements."

Refined coal tar that is the base material used to make pavement sealer has been tested and does not meet the RCRA hazardous waste criteria. Different brands of pavement sealcoat emulsion tested at



different times in different labs have all passed EPA's toxicity characteristic test, indicating that RTS does not meet the criteria to be a hazardous waste and disposal in non-hazardous waste landfills is appropriate.

WHAT IS THE CONNECTION BETWEEN COAL TAR AND PAHS?

The FDA evaluated safety of coal tar based on exposure of humans to medicinal products that contain coal tar. Controversies about the safety of refined coal tar-based sealer began because one of the components of coal tar-derived materials is a class of chemical compounds called polycyclic aromatic hydrocarbons (PAHs). Cancer classifications of PAHs by environmental agencies typically evaluate how laboratory animals such as rats and mice react when exposed to high doses of individual PAH compounds made in a laboratory. Test results in laboratory animals exposed to laboratory-made compounds are then used by regulatory agencies to make assumptions about how humans might react if exposed to PAH-containing materials.

Thus there is a conflict between regulations based on actual human exposures to real-world substances and regulations or guidance based on exposures of laboratory animals to substances that no one (except maybe laboratory technicians) is actually exposed to.

In the US, the Environmental Protection Agency recognizes that there are thousands of products and foods that contain some mixture of PAHs. Testing each one would be prohibitively expensive. So EPA's solution has been to develop methods of estimating risks that could be associated with products containing PAHs by extrapolating from laboratory animals to humans based on calculations of PAHs contained in a food or product. How the PAH compounds that are part of the make-up of coal tar and, to greater and lesser extents, of coal tar derivatives, could be calculated to cause effects so different from those seen in people exposed to products containing refined coal tar is a matter for academic study.

WHERE ELSE ARE PAHS FOUND?

PAHs occur naturally; they are all around us and always have been. PAHs are made whenever something organic is heated up or burned. Smoke from forest fires and wood burning fire places contains PAHs. Plants decaying in a swamp or a compost pile are making PAHs. Emissions from planes, trains and automobiles, cooking food, lubricating oils, volcanic eruptions – PAHs are in all those substances as well as in materials derived from coal tar. This means that PAHs are everywhere in our environment. PAHs have been around since the dawn of man. If there was a fire that offered our ancestors warmth or light, or cooked their food, PAHs were present.



WHY IS REFINED COAL TAR-BASED SEALER NOT USED AS MUCH ON THE WEST COAST?

Crude coal tar is a byproduct of making steel. The steel industry is largely located east of the Rocky Mountains. To be close to the source of their raw materials, coal tar refineries that make the base material for refined coal tar-based sealer are located near where steel has historically been made. Transportation costs and the more arid climates make locally produced asphalt-based sealers the cost effective choice on the west coast.

ARE ASPHALT-BASED SEALERS CHEAPER?

All else being equal, asphalt-based sealers are generally cheaper on the west coast, but not in the Midwest or east. The pricing of the asphalt-based product tends to be a little more volatile, as it fluctuates with the price of crude oil. Another cost factor can be that manufacture of refined tar-based emulsion is a one stage process, requiring fewer additives whereas making asphalt-based emulsion requires at least two stages and more additives and chemical fortifiers that enhance performance.

IS THERE A DIFFERENCE BETWEEN “DRYING” AND “CURING” SEALER?

Like latex paints, sealer is applied as a water-based emulsion. All emulsions contain water. Evaporation of the water starts the process of “sticking” the sealcoat particles to each other and to the coated pavement. Sealer that is dry to the touch means that the surface can be open to foot traffic, but not vehicle traffic. Sealcoat can be driven on once the process of curing is well underway, meaning that the sealer particles are sticking to each other and the pavement. Curing takes more time than drying because it takes longer to drive out moisture that remains after the initial drying.

WHY CAN YOU SOMETIMES STILL SMELL THE SEALCOAT EVEN AFTER ITS OPEN TO TRAFFIC?

The odor of refined tar-based sealer is easily identifiable, for good reason: refined tar-based sealer has a very distinct odor, and the human nose is able to detect it at extremely low concentrations. But just because it may smell bad doesn't mean it is bad!

The smell is primarily the presence of one substance among the many that are part of refined tar-based sealer – naphthalene. The odor threshold for naphthalene is below three parts per billion (ppb), a very low concentration. To put this concentration into perspective, the odor threshold for nail polish remover is 7,000.

According to the American Conference of Governmental Industrial Hygienists, the level of naphthalene that is considered safe for workers is ten thousand parts per billion. So the difference between being able to smell it and worrying about it is huge – four orders of magnitude, to be exact. Even refined tar-based sealer workers don't experience those levels of exposure.

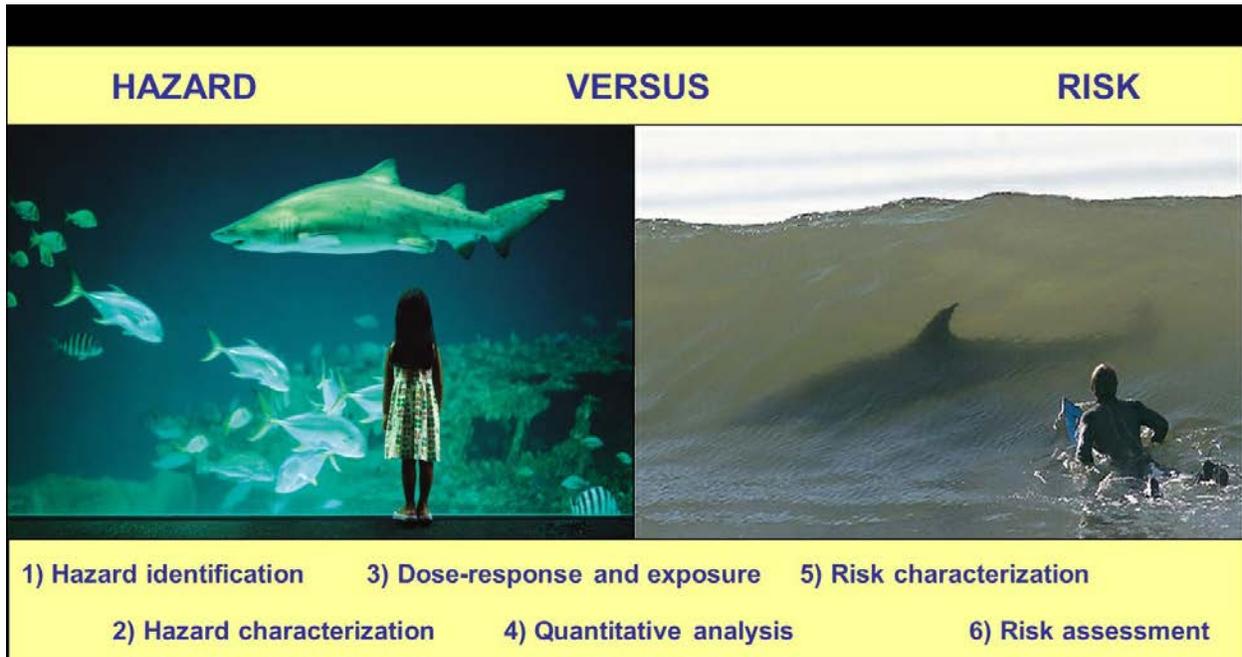


WHY IS SEALCOATING NOT RECOMMENDED IF THE WEATHER IS COLD OR IT'S GOING TO RAIN?

For the same reason that exterior painting is not recommended in cold or wet weather, sealcoat is not applied in those conditions because the water in the emulsion won't evaporate. If the water doesn't evaporate, sealcoat particles can't begin the curing process of sticking to each other and the coated surface.



HAZARD VERSUS RISK



Environmental activist groups that promote regulation of RTS and other substances are making the claim that the USEPA and other agencies are not doing an adequate job of regulating chemicals in products. Many of these groups want the government to regulate on the basis of **hazard** rather than **risk**. In the world of regulation, the word “**hazard**” has a specific meaning, referring to an inherent property of a substance that, in certain circumstances can be dangerous. Water, for example, is a drowning **hazard**, can make you sick if ingested in excess, and can be really dangerous when frozen. Take a look at [this](#) spoof website about dihydrogen monoxide – the chemical name for water. The website authors use language to describe facts about water that make it sound scarily dangerous, so much so that the government seems negligent for allowing it to be so unregulated.

The same type of fear-mongering tactics are used by the advocates of RTS bans. In presentations, writings and web sites, pro-ban advocates never fail to point out **hazard listings** of coal tar without mentioning the circumstance in which the **hazard** may be associated with an **actual risk** that needs to be managed– that is, high temperature industrial settings. . In the US, it is typically the most extreme anti-chemical activists that use alarmist techniques such as using hazard listings, regulations based on hazard listings such as OSHA’s Hazard Communications (HazCom) rules and manipulated exposure circumstances as tools to communicate unwarranted fear.

Unlike most materials that might be released into the environment, there are lots of data about human exposure to high concentrations of coal tar because of its pharmaceutical uses. The US Food & Drug Administration (FDA) classifies coal tar and coal tar derivatives as “Generally Recognized as Safe and Effective” and authorizes use in Over-the-Counter skin care products (that is, no prescription needed) at concentrations up to 5% coal tar.



Patient undergoing coal tar application as part of Goeckerman treatment.

Photo courtesy of the University of Michigan Health System

The photograph on the left shows that, under supervision of a physician in a clinical setting, patients are exposed to refined coal tar (very high concentrations of PAHs) at much higher concentrations in a procedure known as Goeckerman treatment. More information about this procedure can be found at the web site of the [National Psoriasis Foundation](http://www.psoriasis.org).

Indeed, there are **hazards** that are thought to translate into **actual risks** associated with occupational exposures to coal tar or coal tar pitches (and the PAHs contained therein) in high-temperature (1000s of degrees C) industrial processes. Classification as a “known human carcinogen” applies **ONLY** to workers in high-temperature industrial settings.

A more complete description of what the data show about non-pharmaceutical human exposures to coal tar and its derivatives can be summarized as follows:

- There is no evidence that low level or intermittent exposure to coal tar or coal tar pitch has caused cancer in humans. This category describes exposures to refined coal tar-based sealer.
- There is little evidence that high level, repeated exposures has caused cancer in humans. This evidence is largely reports from the past, such as chimney sweeps in London in the 18th century (but interestingly, not chimney sweeps in other countries at about the same time) and late 19th – early 20th century factories, at a time when industrial hygiene practices were virtually non-existent. The working conditions described in these reports include exposures to many chemicals in addition to coke and coal tar.
- There are some studies conducted in modern factories with high temperature (1000s of degrees Fahrenheit) industrial processes such as aluminum smelting or coke oven gases that show some adverse effects.

So that is one of the ways environmental activists create alarm – by taking advantage of the fact that most people haven’t thought about the difference between **hazard** and **risk**. The next two pages contain a list from RealClearScience.com of the every-day items that have a **cancer hazard classification**, meaning that, **under certain exposure circumstances**, they might pose an **actual risk**.



Everything Causes Cancer!

Posted by **Ross Pomeroy** April 8, 2013

Let's just cut to the disquieting chase: pretty much everything in life has been claimed to be linked to cancer. Look at the long list below. You probably deal with at least a few of these supposed carcinogens on a daily basis:

Facebook
Wine
Catching a cold (in childhood)
Antiperspirants
French Fries
Oral Sex
Vitamin E Supplements
Red Food Dyes
Salty Soup
Hair Dyes
Mouthwash
Sun Tan Lotions
Pringles
X-rays
Moisturizers
Cell Phones
Talcum Powder
Red Meat
Alcoholic Beverages
Asbestos
Smoked Salmon
The Sun
Tobacco Products
Chloroform
Formaldehyde
Bubble Tea Tapioca Pearls (Whatever those are...)
Microwave Popcorn Bags
Baby Shampoo
Sugar
Salt
Eggs
Corn
Coffee
Cheese
Butter
Bread
Bacon
Grapefruit
Vegetable Oils
Being Fat
Coca-Cola & Pepsi
Hot Dogs
Taking a Trip to Cancun
Stress
Male Hair-Loss Pills
Anal Sex
Buses (pdf)
Artificial Sweeteners
Cholesterol-lowering Drugs
Bras
Household Cleaning Products
Air Fresheners



Aspirin
Chicken Meat
Health Supplements
Airport Scanners
Milk
Microwave Ovens
Fluoridated Water
Burnt Toast
Brushing your teeth poorly
Marijuana
Modern Life (Yes, life, itself.)

After reading this extensive, though probably not exhaustive, list you may very well feel a slight inclination to live out the remainder of your life in a plastic ball. But I would encourage you to repress that urge, as many (but not all) of the supposed carcinogens listed above **lack reliable supporting science**. Of course, that doesn't stop headline-hungry media and Internet outlets from publishing attention-grabbing stories, no matter how unsubstantiated they may be.

These outlets may not take health reporting seriously, but that doesn't stop cancer from being a serious health problem. The **American Cancer Society projects** that 580,350 Americans will die of cancer in 2013 alone. The cancer death rate has decreased in the past decades, but it's still far too high. Cancer deserves serious reporting, yet some outlets seem only interested in fear-baiting. This vexing situation irks a great many oncologists.

"Anxiety concerning insidious cancer causation could divert attention from proven means of cancer prevention," **noted cancer researcher Bernard Stewart** wrote in *The Lancet Oncology* last year. These proven means can be as simple as eating a balanced diet, enjoying alcohol in moderation, exercising, and abstaining from the use of tobacco products.

When it comes to cancer, the media should be focused on providing meaningful and critical coverage, not using the grave disease as a tool to attract anxious readers.

Note: Living in a plastic ball isn't a surefire way to avoid cancer, as it seems **plastics may also contribute to the disease!*

(Special thanks to the **Daily Mail UK** for providing the majority of the cancer scaremongering! If you know of any more carcinogens to add to the list, let me know in the comments below!)



Date: July 25, 2014
To: E. Gene Greable, President – Village of Winnetka
From: Mark Biel, Executive Director, Chemical Industry Council of Illinois
Re: Village of Winnetka Proposal Ban of Refined Tar Sealer (RTS)

WTS

Mr. Greable, as requested, here the Refined Tar Sealer (RTS) industry comments on the Village of Winnetka's proposed ban of Refined Tar Sealer:

- 1) Based on comments made at the July 8 Environmental & Forestry Committee Hearing, it appears that the Village of Winnetka has not tested its stormwater discharge to determine if there are PAHs in the Winnetka discharge.

At a minimum, an ordinance banning RTS seems premature prior to the Village determining if PAHs are in the stormwater discharge. If PAHs are in the stormwater discharge, it's a relatively simple process to determine if the PAHs are from Refined Tar Sealer (RTS) or other sources of PAHs.

- 2) The comment was made that the IEPA would look favorably on Winnetka's permit for stormwater discharge if RTS was banned in the village.

Please note that the IEPA doesn't consider PAHs levels in granting or denying permits for stormwater discharges into Lake Michigan. Also please note that the IEPA has not supported any legislative efforts in the Illinois General Assembly to ban the use of RTS in Illinois. Neither has the Illinois Department of Public Health supported any efforts to ban RTS in Illinois.

There are many reasons PAH levels in sediments (and discharges to sediments) are not of high concern to agencies such as IEPA, including that the USEPA long ago determined that there is rarely any correlation between PAH concentrations in sediment and sediment toxicity. The reason for this has been found to be that PAHs, which are virtually insoluble in water, are not usually bioavailable.

- 3) Additionally the comment was made at the hearing that the Illinois Department of Natural Resources (IDNR) was considering a ban of RTS in coastal areas. After conversation today with IDNR, the IDNR staff made it very clear that the Department doesn't have any regulatory authority to ban RTS or any other substance.

- 4) Here's a brief summary of what the USEPA says about coal tar:

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Springfield

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Website: www.cicil.net

- Under the Resource Conservation and Recovery Act (RCRA), the USEPA exempts crude coal tar from coking ovens from listing as a hazardous waste as long as it is recycled or *refined*. This exemption is to encourage recycling, and works because, although *crude* coal tar might contain some extraneous hazardous materials, those are removed in the *refining* process resulting in refined coal tar that does not meet any of the criteria of hazardous waste set up under RCRA by USEPA. Refined coal tar is the product used in manufacturing Refined Tar Sealer (RTS).

- This RCRA exemption has been reinforced by a court case which found that coal tar in the form of Manufactured Gas Plant (MGP) remediation waste does not meet RCRA hazardous waste characteristic criteria. USEPA did not appeal that court finding, but instead issued a letter opinion and an internal memo supporting the court's finding and stating that it is appropriate to dispose of MGP remediation waste (that is, coal tar) in non-hazardous waste landfills. By the way, the court's opinion was written by now-U.S. Supreme Court Justice Ginsburg when she was on the DC Circuit Court, before being nominated to the Supreme Court.

The other top level piece of legislation/regulation is the FDA, which defines coal tar in exactly the same way as industry would. The RTS base material is "further processed" and is a fractional distillate. See attached photograph – Goeckerman Treatment

Here are the FDA definitions for Coal Tar and Coal Tar's use in FDA Approved Products

21 CFR 358.703 (Definitions) (a) Coal tar. The tar used for medicinal purposes that is obtained as a byproduct during the destructive distillation of bituminous coal at temperatures in the range of 900 °C to 1,100 °C. It may be further processed using either extraction with alcohol and suitable dispersing agents and maceration times or fractional distillation with or without the use of suitable organic solvents.

21 CFR 358.71 (Active Ingredients for dandruff, seborrheic dermatitis, or psoriasis)... Coal tar, 0.5 to 5 percent. When a coal tar solution, derivative, or fraction is used as the source of the coal tar, the labeling shall specify the identity and concentration of the coal tar source used and the concentration of the coal tar present in the final product.

- 5) While two U.S. Geological Survey (USGS) researchers in Austin, TX claim RTS is a problem, the USGS has not called for banning of the use of RTS.

In addition, after four appeals of USGS FOIA responses by the Pavement Coatings Technology Council (PCTC), which seeks the data underlying claims made by the two USGS researchers in Austin, TX, PCTC was forced to file suit in

U.S. District Court for the District of Columbia on July 16, 2014 for injunctive relief against the USGS because the USGS has failed to even acknowledge, much less respond to, PCTC's four FOIA appeals. (Case No. 14 cv 01200).

It's very frustrating for the RTS industry to be attacked by two government researchers who so far have resisted efforts to turn over their data and have their data analyzed.

- 6) After reading the Winnetka Environmental & Forestry Committee report on Refined Tar Sealer (RTS), it's clear that the Environment committee didn't talk to anyone who manufactures RTS. While the committee did talk to an RTS applicator about availability of alternatives and price, the committee appears to have made no effort to talk with anyone at Pavement Coatings Technology Council or the three RTS manufacturers in Illinois.

With the utmost respect, the report is clearly written with a strong bias against RTS. If RTS were as bad as described in the report, I'm sure federal and state regulatory agencies would have taken immediate action to ban the product. They haven't. One reason they haven't is that refined coal tar does not even meet USEPA's criteria to be considered hazardous waste under the Resource Conservation and Recovery Act (RCRA). The USEPA and federal courts (208 F3d 1047 (DC Circ. 2000) have both issued opinions clarifying that coal tar (which is the essential constituent in Manufactured Gas Plant (MGP) remediation waste) is, to quote USEPA:

Therefore, absent the TCLP test, MGP remediation wastes are unlikely to be RCRA hazardous waste under the federal program, and would not be required to meet RCRA requirements, including Land Disposal Restriction requirements. (United States Environmental Protection Agency, Letter to Vectren Corporation, dated October 19, 2000. RCRA Online No. 14491 Available at <http://yosemite.epa.gov/osw/rcra.nsf/0c994248c239947e85256d090071175f/161034d3f5e9d3a1852569c900623edb!OpenDocument>)

Refined coal tar that is the base material used to make RTS pavement sealer has undergone TCLP testing (*Toxicity Characteristic Leaching Procedure testing - The TCLP is designed to determine the mobility of both organic and inorganic analytes present in liquid, solid, and multiphase wastes*) and, as USEPA predicts, does not meet the RCRA hazardous waste criteria. Different brands of pavement sealcoat emulsion tested at different times in different labs have all passed USEPA's toxicity characteristic test (TCLP), indicating that RTS does not meet the criteria to be a hazardous waste and disposal in non-hazardous waste landfills is appropriate.

- 7) While true that some big box hardware stores (Home Depot, Lowes) don't sell RTS, interestingly most of these same stores specify RTS use on their own

parking lots. These big box stores realize that when protecting their substantial parking lot investment, RTS is recognized as a far superior product compared to asphalt emulsion.

The big box stores decision to take RTS off the shelf was due to pressure from activists and not because of any health or environment concerns with RTS.

NO HEALTH EFFECTS

- There is no record that PAHs from these pavement sealers have ever caused harm to anyone. Ready-to-use pavement sealers (both refined coal tar and asphalt based) have never been cited for a health concern due to the use of its sealers. Not even the proponents of a ban can show that RTS has ever harmed anyone beyond skin irritation effects experienced by some applicators.
- Air sampling studies showed refined coal tar based sealers pose no inhalation risk to applicators, manufacturers or the general public.
- The U.S. Food and Drug Administration (FDA) has approved coal tar for decades as a base ingredient for skin creams and shampoos that fight certain skin conditions. The FDA would not approve over the counter products to be applied to the skin and scalp if they were harmful. The amount of PAH's produced by these FDA-approved products are as high if not higher than that found in refined tar sealer. Denorex shampoo highlights in their ads that their product contains up to twice as much coal tar as their competitors.
<http://www.denorex.com/therapeutic-dandruff-shampoo>
- The IARC (International Agency for Research on Cancer) has not classified refined tar or refined coal tar based sealers as a human carcinogen. Refined tar sealer is not and has never been classified as a hazardous material by the USEPA.
- In 60 years of use, not one single liability or workers' compensation claim has been made relative to any type of chronic harm caused by RTS. Companies, contractors, and home owners have safely used RTS and have not experienced any adverse effects.

FACTS ON SEALANTS AND POLYCYCLIC AROMATIC HYDROCARBONS (PAHs):

- While coal tar is commonly used in medicinal products, such as dandruff shampoos, psoriasis and eczema treatments, coal tar is also commonly used to seal drinking water pipes as well as sewer and storm water drain pipes as coal tar is insoluble in water and protects the piping from damage related to caustic substances that can build up in piping.

- PAH's are a group of more than 100 chemical compounds that are everywhere in the environment in such diverse sources as: auto exhaust, motor oil, industrial processes, electric power generation, wood and yard waste burning, and even barbeque grilling. Comprehensive mass balance studies of urban harbor sediments have estimated that PAH's from Refined Tar Sealer account for less than one half of a percent (0.4%) of the PAH.
- Studies have consistently found that traffic-related emissions, not runoff from pavement sealed with refined tar-based sealer, are the primary source of all PAHs in the urban environment.
- A focus on just refined tar-based sealants won't reduce the amount of PAHs. Even concrete pavements that do not require sealants do collect PAHs from spills, leaks, abrasion and atmospheric deposition which may be washed into streams during rain events.

ALTERNATIVES NOT EFFECTIVE

- Asphalt emulsions also contain PAH's.
- RTS is chosen over asphalt emulsion as a better raw material based on its ability to prevent the intrusion of gas, oil, and other petroleum products from damaging the pavement, and the very hard film that RTS forms over the pavement, making it very durable.
- Asphalt emulsions are used as a raw material in sealer only as a substitute, in areas where RTS is not available, and has proven to be an inferior substitute. Asphalt emulsion sealers only last a couple of years, only one coat can be applied in a day, and wash out areas are very common. If properly applied, RTS can last two to three times longer than asphalt emulsion sealers.
- Due to seasonal differences between RTS and alternative sealers, businesses will see a 20% reduction in the time in which they can be applied as the application season (weather) for asphalt emulsion is shorter. This is more than a theoretical estimate. Bans in local communities with milder warmer climates than Northern Illinois have demonstrated that a 20% reduction is likely a low estimate.

ENVIRONMENTAL EFFECTS

Banning sealants in the long run will have a much greater impact on the environment and natural resources:

- Pavement life will be decreased dramatically, requiring increased levels of asphalt replacement, overlayments, and total replacements. This will require more crude oil to manufacture the asphalt, more rock extracted from our rock

quarries, more fuel to manufacture asphalt and raw materials, not to mention the performance of this work.

- Most asphalt pavements will need to be replaced within 10 years. Properly maintained RTS sealed pavements have been shown to last for 30 years or more.
- Place a financial burden on homeowners and businesses from the need to reapply asphalt emulsion sealers more often than RTS, not to mention the lack of "curb appeal" which attracts customers to a freshly sealed and well maintained parking lot.



ACTIVISTS FALSE ARGUMENTS

Activists who are campaigning against the use of refined tar-based pavement sealer (RTS) generally make arguments that rely on distortions and discredited interpretations of environmental and health science evidence.

False Argument #1: RTS is the source of a high percentage of compounds known as polycyclic aromatic hydrocarbons (PAHs) in sediments in lakes, streams and storm water retention ponds.

This argument is based on a mathematical model manipulated to falsely identify sealants as the source of PAHs. Results given by the manipulated model have been shown to be inconsistent with other methods (graphical, statistical, mathematical models) commonly used to help identify sources of PAHs. The manipulated model identifies sealant as the main source of PAHs even in locations where sealant is not likely to have been used as well as remote locations with no nearby paved surfaces. When other common methods are used to identify sources of PAHs, little or no contributions from RTS have been found in most locations.

False Argument #2: RTS is a health hazard.

Across the two, three and four generation memories of the many family-owned companies in the RTS business, there are no reports of adverse chronic health effects directly attributable to RTS. Expanding the search for possible health hazards to other products made from refined tar, every day millions of people world-wide use coal tar soaps, shampoos and creams approved for over-the-counter sales to treat skin disorders such as eczema, psoriasis and dandruff. A refined tar product is used to coat the inside surfaces of pipes used to distribute drinking water in many areas, with no demonstrable adverse effects on the water-drinking public. The false argument is that, theoretically, there could be health effects based on the classification of constituent ingredients as possible human carcinogens, which classifications in turn are based on exposure of laboratory animals to high concentrations of individual PAH compounds¹ or on occupational exposure of coke oven workers. There is simply NO evidence that RTS causes cancer.

¹ PAHs are never found as individual compounds in nature and are rarely isolated for commercial purposes. Individual PAH compounds are artificially isolated for laboratory testing. RTS is a mixture of clays, sand and refined tar that itself is a mixture that includes PAHs..

False Argument #3: RTS pollutes water supplies.

The false argument is that PAHs derived from RTS are a threat to water supplies. Even if RTS were an important source of PAHs found in sediments, neither RTS nor PAHs pose any threat to water supplies because RTS and indeed, PAHs in any form, are virtually insoluble in water. Examples of the virtual absence of PAHs in water can be found in every US state’s Clean Water Act Section 303(d) reports, in which reports of PAHs as a cause of impairment of water quality are extremely rare. Every drinking water system in the US is required to analyze and report chemicals found in water distributed to homes – it is exceedingly rare for drinking water suppliers to find PAHs in drinking water supplies.

False Argument #4: RTS is based on a hazardous waste, and banning it is a factor in approval of MS-4 permits.

Neither RTS nor its coal tar base are hazardous wastes because they pass EPA’s hazardous waste TCLP test, and so are not subject to Land Disposal Restrictions in federal hazardous waste regulation program. This has been affirmed by federal courts. Measures to control PAHs or coal tars are not factors in approval of MS-4 permits. PCTC has challenged EPA to correct misinformation about RTS on its storm water web site.

False Argument #5: There’s an alternative product available, so why not just ban RTS?

Asphalt-based pavement sealers (ABS) are indeed an alternative, but they are not a replacement because ABS does not do the same job. Where both are available, RTS is preferred for most applications. This preference is mostly because RTS is resistant to degradation caused by leaks/spills of petroleum-based products (such as gasoline, jet fuel, motor oil, etcetera), to other corrosive materials and because of longevity. ABS needs to be re-applied more often than RTS – depending on the situation, the longevity of RTS can be years longer than ABS. In addition, RTS is manufactured to a standard which, among other things, means its physicochemical properties are predictable. There have been and continue to be attempts to develop standards for ABS manufacture, but there isn’t one at this time. The predictability and performance characteristics of RTS are the prime reasons RTS is specified for many situations.

Most of the companies involved in the RTS industry are small and medium size businesses – just the sort of businesses that are disadvantaged by the rush to regulation that seems to be popular now. RTS manufacturers and suppliers are good corporate citizens, with well paid, often unionized work forces. Recently, the Pavement Coatings Technology Council held a webinar for sealcoating contractors. Of the 265 industry participants who registered for the webinar, 47% were from companies with 10 or fewer employees. Another 32% were from companies with 11 to 35 employees. This reflects the industry, dominated by small to very small local businesses. Contractors in northern states estimate that using ABS rather than RTS reduces their sealcoating season by, at a minimum, 20%, thereby reducing their income by 20% or more.





PAVEMENT SEALANTS IN THE ENVIRONMENT RESEARCH FUNDED BY PCTC

PCTC has been actively engaged in funding new science projects and reviews of existing information to try to answer the question:

Does pavement sealant pose a threat to human health or the environment?

Some people seem think that businesses are not interested in potential health or environmental impacts of their products. But businesses are collections of people too, with families and friends and deep concerns about health and the environment. For PCTC this has meant a directive to try to answer the question above, as no PCTC member wants to be in a business that causes harm.

The following pages lists published papers and reports funded by PCTC to help answer the question. PCTC's first choice is that work that it funds be submitted for publication to a peer-reviewed science journal, and a number of such articles are included on the list. PCTC has also submitted a number of detailed evaluations of available science to government agencies such as EPA, the US Geological Survey and state agencies. Those submissions are also listed, as are reports prepared by consultants available on PCTC's web site. Links to web sites where those comments and reports are posted are provided in the list.

If you would like to see any of the publications on this list, please contact alehuray@pavementcouncil.org and copies of the papers or reports will be provided.



PUBLICATIONS OF SCIENTIFIC STUDIES OF TAR-BASED SEALANTS IN THE ENVIRONMENT

SPONSORED BY THE PAVEMENT COATINGS TECHNOLOGY COUNCIL

(REV. JUNE 25, 2014)

Peer Reviewed Papers in Science Journals:

O'Reilly, K., Ahn, S., Pietari, J. and Boehm, P. (2014). Use of Receptor Models to Evaluate Sources of PAHs in Sediments. *Polycyclic Aromatic Compounds*. Awaiting DOI.

O'Reilly, K. T., Pietari, J. and Boehm, P. D. (2014), Parsing pyrogenic polycyclic aromatic hydrocarbons: Forensic chemistry, receptor models, and source control policy. *Integr Environ Assess Manag*, 10:279–285.

O'Reilly, K., Pietari, J. and Boehm, P. (2012). A Forensic Assessment of Coal Tar Sealants as a Source of Polycyclic Aromatic Hydrocarbons in Urban Sediments. *Environmental Forensics*, 13:185-196.

DeMott, R.P., Gauthier, T.D., Wiersema, J.M. and Crenson, G. (2010). PAHs in Austin Sediments after a Ban on Pavement Sealers. *Environmental Forensics*, 11:4, 372-382.

Post-Publication Peer Reviews Published in Science Journals (Including Submitted Reviews & Responses):

Gauthier, T.D. (2014). Comment on "Coal-tar pavement sealant use and polycyclic aromatic hydrocarbon contamination in urban stream sediments." *Physical Geography*. Submitted.

O'Reilly, K. (2014). Published results do not support the author's hypothesis. Letter to the Editor of *Archives of Environmental Contamination and Toxicology*. Submitted.

O'Reilly, K., Pietari, J. and Boehm, P. (2014). Author's Reply to Van Metre and Mahler's Letter to the Editor on "Parsing pyrogenic polycyclic aromatic hydrocarbons: Forensic chemistry, receptor models, and source control policy." . *Integr Environ Assess Manag*. DOI: 10.1002/ieam.1556.

O'Reilly, K., Pietari, J. and Boehm, P. (2014). Author's Reply to Crane's Letter to the Editor on "Parsing pyrogenic polycyclic aromatic hydrocarbons: Forensic chemistry, receptor models, and source control policy." . *Integr Environ Assess Manag*. 10:325–326. DOI:10.1002/ieam.1548

O'Reilly, Kirk (2014). Response to authors' reply on "Coal-tar-based sealcoated pavement: A major PAH source to urban stream sediments" *Environmental Pollution* 191:264-265.

O'Reilly, Kirk (2014). Article Title Misstates the Role of Pavement Sealers. Letter to the Editor of *Environmental Pollution* 191:260-261.

Magee, Brian and Janet Keating-Connolly (2014). Comment on "Cancer Risk from Incidental Ingestion Exposures to PAHs Associated with Coal-Tar-Sealed Pavement". *Environmental Science & Technology*, 48 (1), pp 868–869.

O'Reilly, K., Pietari, J. and Boehm, P. (2011). Comment on "PAHs Underfoot: Contaminated Dust from Coal-Tar Sealcoated Pavement is Widespread in the U.S." *Environ. Sci. Technol.*, 2011, 45 (7), pp 3185–3186

DeMott, R.P.; Gauthier, T.D. (2006) Comment on "Parking lot sealcoat: An unrecognized source of urban polycyclic aromatic hydrocarbons." *Environ. Sci. Technol.* 2006, 40(11), 3657-3658

Post-Publication Peer Review Reports:

O'Reilly, K. (2014). *Technical Evaluation of Van Metre and Mahler 2010*. Report prepared for PavementCouncil.org by Exponent. Will be available at <http://www.pavementcouncil.org/scientific-journals> pending submission to government agencies.

Gauthier, T. (2014). *Review of Pavlowsky 2013*. Report prepared for PavementCouncil.org by Environ. Will be available at <http://www.pavementcouncil.org/scientific-journals> pending publication of formal comment.

Magee, B. and Keating-Connolly, J. (2013). *Peer Review of Coal-Tar-Sealed Pavement Risk Assessment*. Report prepared for PavementCouncil.org by ARCADIS. Available at <http://www.pavementcouncil.org/scientific-journals>. Condensed version published as a comment in Environmental Science & Technology (Magee and Keating-Connolly, 2013).

DeMott, Robert, Thomas Gauthier and Michael Masonjones (2013). *Volatilization of PAHs from Coal-Tar-Sealed Parking Lots*. Report prepared for PavementCouncil.org by Environ. Available at <http://www.pavementcouncil.org/scientific-journals>.

Environ International (2010). Review of "Coal-Tar-Based Parking Lot Sealcoat: An Unrecognized Source of PAH to Settled House Dust" by Mahler et al., published in Environmental Science and Technology, January 2010. Report prepared for PavementCouncil.org by Environ. Available at <http://www.pavementcouncil.org/scientific-journals>.

Submissions to Government Authorities:

Information Quality Act Request for Correction of Information Under the U.S. Environmental Protection Agency Information Quality Guidelines. Information requiring correction includes a CADDIS web page and a document titled *Stormwater Best Management Practice: Coal-Tar Sealcoat, Polycyclic Aromatic Hydrocarbons, and Stormwater Pollution*. April 16, 2014. Available at <http://www.epa.gov/quality/informationguidelines/iqg-list.html>

PCTC (2014). The Great Lakes Coal Tar Sealcoat PAH Reduction Project: Comments and Recommendations of the Pavement Coatings Technology Council. Comments submitted to the EPA Great Lakes Program Office and several state agencies located within EPA Region 5. January 21, 2014. Available at <http://www.pavementcouncil.org/blog>

Information Quality Act Requests for Correction of Information Under the U.S. Geological Survey Information Quality Guidelines, available at http://www.usgs.gov/info_qual/

- May 15, 2013: Topic – There is No Scientific Basis for the USGS to Claim that RTS is a Major Source of PAHs in U.S. Sediments
- May 31, 2013: Topic – The USGS is Using Inaccurate and Misleading Photographs of Fish with Skin Tumors as a Scare Tactic to Promote Advocacy Goals



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- September 17, 2013: Topic – USGS claims of health risks are based on a “risk assessment” that exaggerates exposure, selects data for inclusion or omission without explanation, fails to consider the many other sources of PAHs, does not use best-available toxicity estimates, and many other flaws of both omission and commission.

DeMott, Robert (2004). Review and Evaluation of Coal Tar Emulsion Sealers and Potential Runoff Transport of Polycyclic Aromatic Hydrocarbons. Report prepared for Pavement Coatings Technology Center of the University of Nevada-Reno by Environ, submitted to the City of Austin, TX January 8, 2004. Available at <http://www.pavementcouncil.org/scientific-journals>.

Articles Published in Magazines for Professionals:

LeHuray, A. (2014). Understanding Sealer Basics. Pavement Maintenance Magazine March 2014 (published online Feb. 25, 2014).

Pietari, J., O'Reilly, K. and Boehm, P. (2010). Polycyclic Aromatic Hydrocarbons in Stormwater and Urban Sediments: A Review. *Stormwater Magazine*. September 2010.

Presentations at Recent Scientific Meetings:

LeHuray, A. and Beatty, K. (2014). Key Science Issues to be Considered in the IRIS Hazard Assessment of the Index Compound for the PAHs, Benzo(a)Pyrene. Presentation at the NIOSH 2014 Toxicology and Risk Assessment Conference (TRAC), Cincinnati, OH April 7-10, 2014.

Magee, B. and Keating-Connolly, Janet (2013). Research-Based Input Parameters for Risk Assessment of Coal-Tar-Based Pavement Sealants. Abstract accepted for presentation at the 34th annual meeting of the Society of Environmental Toxicology and Chemistry (SETAC) Nashville, TN November 17-21, 2013.

O'Reilly, K., Mudge, S. and Boehm, P. (2013). Receptor Models for PAH Source Characterization: Opportunities and Limitations. Presentation at the 34th annual meeting of the Society of Environmental Toxicology and Chemistry (SETAC) Nashville, TN November 17-21, 2013.

Pietari, J., Ahn, S., O'Reilly, K. and Boehm, P. (2013) Parsing Pyrogenic PAHs—Urban Background or Refined Tar Products? Presentation at the 29th Annual International Conference on Soils, Sediments, Water, and Energy, October 21-24, 2013, Amherst, MA.

O'Reilly, K., Ahn, S., Pietari, J. and Boehm, P. (2013). Use of Receptor Models to Evaluate Sources of PAHs in Sediments. Presentation at the 24th meeting of the International Symposium on Polycyclic Aromatic Compounds (ISPAC 2013) in Corvallis, Oregon USA September 8-12, 2013.

Magee, B. and Keating-Connolly, Janet (2013). Risk Assessment for Coal Tar-Based Pavement Sealants. Presentation at the 24th meeting of the International Symposium on Polycyclic Aromatic Compounds (ISPAC 2013) in Corvallis, Oregon USA September 8-12, 2013.

O'Reilly K, Pietari J and Boehm P. (2012). Use of Alkyl Polycyclic Aromatic Hydrocarbon Data in Evaluating the Contribution of Pavement Sealers to Urban Sediments. Abstract and Platform Presentation at the 2012 annual meeting of the *Society of Environment Toxicology and Chemistry (SETAC)*.

Feldpausch, A. and Schoof, R. (2012) Development of a residence-specific, health-based screening criterion for benzo(a)pyrene in indoor dust. Abstract of presentation at the 2012 annual meeting of the *International Society of Exposure Science*.



LeHuray, A.P. (2012). Bans of Pavement Sealers Have Demonstrably Absent Environmental Risk Reduction Benefits but Foreseeable and Knowable Economic Harms. Managing for a Healthy and Sustainable Chesapeake Bay: Human and Ecological Risk: *Joint Meeting of the National Capital Area Chapters of the Society of Environment Toxicology and Chemistry (SETAC) and the Society for Risk Analysis (SRA)*. College Park, MD, April 23-24, 2012

O'Reilly, K., Pietari, J. and Boehm, P. (2011). Managing Risks: Will banning pavement sealers have the desired effect? Abstract and Poster Presented at the *32nd Annual Meeting of the Society of Environment Toxicology and Chemistry (SETAC)*, Boston, Nov. 2011.

DeMott, R.P. and Gauthier, T.D. (2011). Use of Mass Balance Bounding Estimates and Sensitivity Analysis to Prioritize PAH Inputs in Urban Systems. Abstract and Poster Presented at the *32nd Annual Meeting of the Society of Environment Toxicology and Chemistry (SETAC)*, Boston, Nov. 2011.

Pietari, J., O'Reilly, K. and Boehm, P. (2011). Environmental Forensics for PAH Source Management: Pavement Sealants and Sediments. Abstract and Poster Presented at the *Sixth International Conference on Remediation of Contaminated Sediments*, New Orleans, LA Feb. 2011.

O'Reilly, K., Pietari, J. and Boehm, P. (2010). PAHs in Urban Sediments: Forensics Approaches for Assessing the Relative Contribution of Atmospheric Deposition. Abstract and Platform Presentation at the *31st Annual Meeting of the Society of Environment Toxicology and Chemistry (SETAC)*, Seattle, Nov. 2010.

Gauthier, T.D. and DeMott, R.P. (2008). Analysis of PAH Concentrations Detected in Austin Texas Stream Sediments Following a Ban on the Use of Coal Tar Sealers. Abstract of Presentation Made at the *29th Annual Meeting of the Society of Environmental Toxicology and Chemistry (SETAC)*, Tampa, Nov. 2008.



KOPPERS INDUSTRIES, INC.

1991

Using Refined Coal Tar Emulsions Safely

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Occupational Health and Product Safety Department

ABSTRACT

Occupational health issues involving sealcoating with refined coal tar emulsions are discussed including the results of air quality studies conducted during sealcoating, emulsion manufacturing and cure out. All data confirm that refined coal tar usage complies with health and safety regulations.

ACKNOWLEDGEMENT

Koppers Industries wishes to gratefully acknowledge the participation of Gem-Seal, Inc., Tampa, FL; Neyra Industries, Inc., Cincinnati, OH; and SealMaster, Inc., Sandusky OH.

Technical Assistance provided by Koppers Industries, Inc. employees Mr. James E. McFadden, Manager, Quality Control, Mr. Leo C. Whiteford and Ms. Mary Ann Deem was substantial and invaluable toward completion of this project.

INTRODUCTION

In response to continuing concerns from property owners, emulsion manufacturers and sealcoat contractors with regard to the potential for adverse effects of exposure to coal tar as well as asphalt products on health and the environment and coupled with a dearth of airborne data on pavement sealer manufacture/application, a series of field as well as laboratory studies were undertaken by Koppers Industries.

Koppers Industries, Inc. is a major distiller of crude coal tar into a variety of products including refined tars utilized in pavement maintenance and, as such, was positioned to undertake the necessary testing.

Crude coal tar is a by-product of making coke for the steel and foundry industries and constitutes a primary feedstock to the coal tar refining industry. Coal tars have been processed in the United States since Koppers Company completed the first by-product coke oven around 1912.

Crude coal tar is comprised of a complex mixture of naturally occurring compounds which are separated in the tar distillation plant into several fractions including refined tars, pitches, creosote and chemical oils. These fractions in turn have a multitude of end uses ranging from consumer products and industrial chemicals to construction materials. Industries utilizing coal tar derived products include wood treating, aluminum, steel, refractory, chemicals, protective coatings, reinforced plastics, roofing and road paving.

SCOPE OF STUDY

Study objectives included (1) characterizing any airborne emissions that might result from sealer manufacture, application and cure out, and (2) evaluating the regulatory status of refined coal tar sealer with respect to health and safety issues.

Air sampling was conducted during hand spray, squeegee machine and drag box sealer applications as well as batch milling utilizing a high speed shear mill, retail pail filling and bulk loading under what were considered representative operating and environmental conditions. In addition, emissions from the surface of sealed pavement immediately following sealer application were evaluated. Airborne emissions for all activities were characterized for those compounds listed in Table 1.

Since no specific Occupational Safety and Health Administration (OSHA) air standard exists for refined tar, the coal tar pitch volatiles (CTPVs) Standard as the benzene soluble fraction of collected dusts, fumes and mists has historically been employed to evaluate coal tar based products including refined tars. CTPVs (as benzene solubles) is utilized as an indicator of polynuclear aromatic hydrocarbons (PNAHs) where PNAHs are considered cancer causing compounds capable of producing skin tumors. Because many other non-PNAHs are soluble in benzene (i.e., aliphatics, resins, polymers), a CTPVs result can be misleading. To address this issue, selected samples were subjected to PNAH analyses where the CTPVs result approached or exceeded 0.1 milligram.

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Table 1. AIR SAMPLE ANALYSES

COMPONENT	OSHA(1) Permissible Exposure Limit
Benzene	1.0 ppm ⁽²⁾
Toluene	100 ppm ⁽²⁾
Xylenes	100 ppm ⁽²⁾
Cresols	5.0 ppm ⁽²⁾
Phenol	5.0 ppm ⁽²⁾
Naphthalene	10 ppm ⁽²⁾
Coal Tar Pitch Volatiles (CTPVs)	0.2 mg/m ³ (3)
Polynuclear Aromatic Hydrocarbons (PNAHs)	where CTPVs approached or exceeded 0.1 milligram

- (1) Occupational Safety and Health Administration.
- (2) Parts of contaminant per million parts of air.
- (3) Milligrams of benzene soluble particulate (including dust, fumes and mists) per cubic meter of air sampled.

Fifteen (15) PNAHs were evaluated using OSHA Analytical Method Number 58. These results serve as a true indicator of PNAH content and indirectly carcinogenicity. The 15 PNAHs were not arbitrarily selected, but repre-

sent those utilized by OSHA as an index of carcinogenicity.

A summary of study conditions as well as those sealer activities surveyed is provided in Table 2.

Table 2. STUDY CONDITIONS SUMMARY

Sealer Activities	Avg. Volume (gallons)	Avg. Area (sq. yds.)	# Samples	Ambient Temp. (°F)		Relative Humidity (%)	
				Avg.	Max.	Avg.	Max.
Hand Spray	1,300	9,300	12	84	94	82	95
Drag Box	1,500	10,000	4	82	94	85	89
Squeegee Machine	1,700	6,700	4	86	98	81	85
Pail Filling	3,000	603 pails	3	104 ¹		67	82
Truck Loading	11,500	2 shifts	4	125-133 ²		67	82
Emulsion Manufacture (high shear batch mill)	20,200	15 batches	7	88	102	58	80
				230-240 ³			
Sealed Pavement - Head Space Tests		2 days	2	99-104 ⁴		81	85
Sealed Pavement - Fugitive Tests		2 days	2	114-118 ⁵		81	85

- (1) Sealer tank filling temperature.
- (2) Federal Material (RP355 E) loading temperature.
- (3) Refined Tar (RT-12) storage tank temperature.
- (4) Maximum enclosure temperature.
- (5) Maximum pavement temperature.

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It should be pointed out that all data represent the use of sealer emulsions formulated with refined coal tar meeting ASTM D 490 Standard Specification for Road Tars - Grade RT-12 as well as Federal Material RP355 E requirements. While formulations varied depending on job specifications, the refined tar content of sealer emulsions involved in the discussed studies was judged to be representative. Bulk samples of Federal Material and "as applied" sealer were collected in conjunction with each survey and revealed refined tar contents for Federal Material and "as applied" sealer ranging from 29-37 wt. % and 12-17 wt. % respectively.

AIR SAMPLE COLLECTION/ANALYSES

Air samples were collected and analyzed in accordance with Occupational Safety and Health Administration (OSHA) and National Institute for Occupational Safety and Health (NIOSH) procedures and methods. The various collection media utilized in the breathing zones of workers (see Figure 1) to approximate inhalation exposure potentials.

Figure 1. Air Sampling Media — Inhalation Exposure Assessment



Similarly, air samplers were placed directly on the surface of sealed pavement within 15 minutes of sealer application to evaluate head space and fugitive emissions where air samplers were located inside a 2.5 cubic foot enclosure (head space emissions) effectively covering a 2 sq. ft. area of sealed pavement (see Figure 2) as well as in an unshielded (fugitive emissions) configuration (see Figure 3).

Figure 2. Head Space Test Configuration

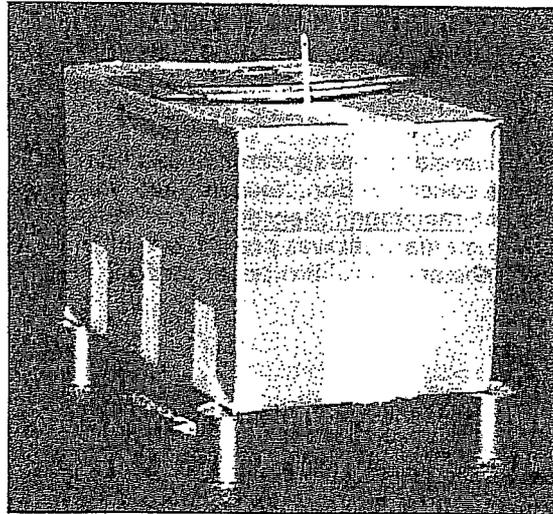
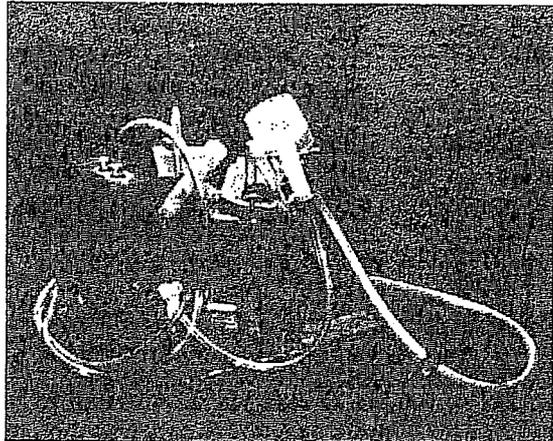


Figure 3. Fugitive Emission Test Configuration



Ambient air was drawn through the various collection media at predetermined flow rates via battery-powered portable sampling pumps.

All analytical work was contracted to an American Industrial Hygiene Association (AIHA) accredited laboratory.

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RESULTS

General

Airborne concentrations of the various compounds tested were below the applicable OSHA Permissible Exposure Limits (PELs) in all cases. Most data were below the Analytical Limit of Detection and reported as the sample volume adjusted limit of detection for the analytical method employed. All data represent a full day of activity where sample durations generally ranged between 7-10 hours. This meets the OSHA sample duration requirements to determine compliance and assess exposure potentials.

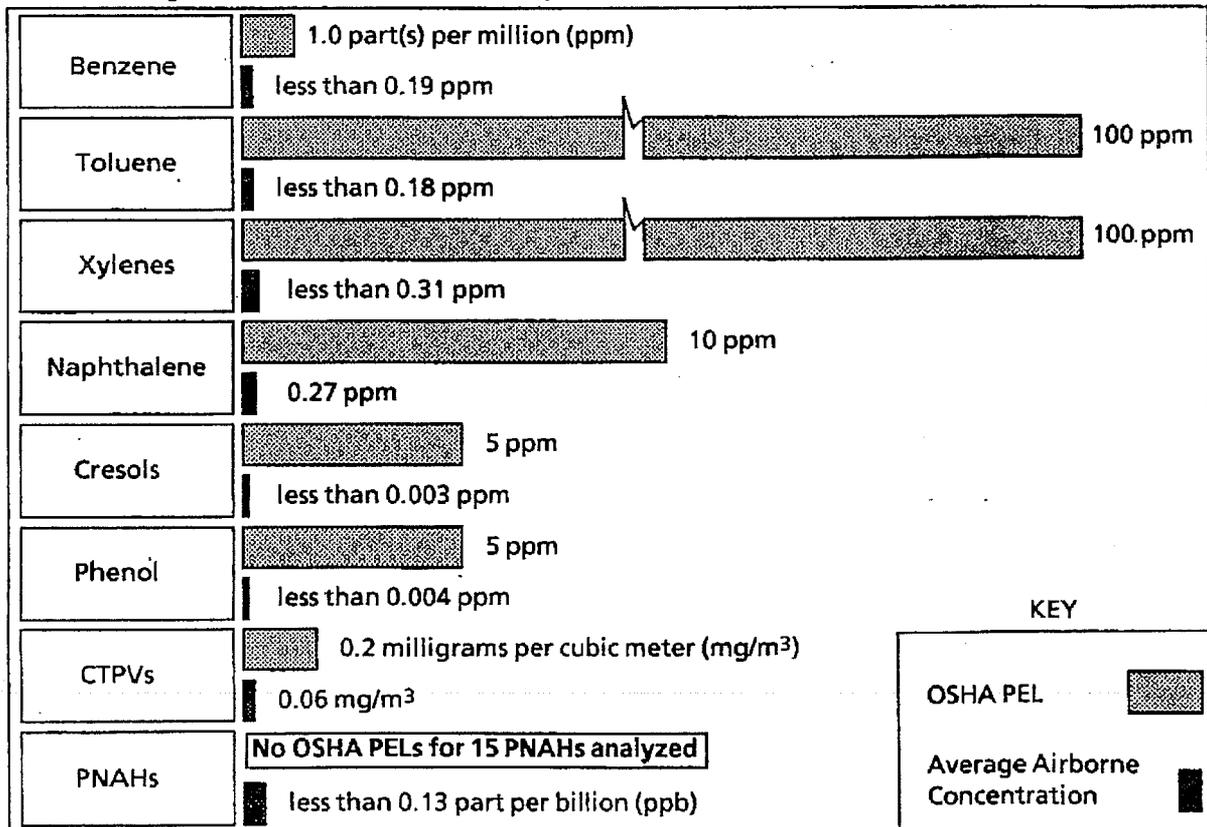
Where data are reported as less than a particular concentration, the involved values represent maximum theoretical concentrations where no material was present on the air sample at the analytical limit of detection.

Hand Spray Application

Airborne levels of volatile organics (benzene, toluene, xylenes and naphthalene) and semivolatile organics (cresols and phenol) were below detectable limits in all cases. CTPVs were detected on roughly 70% of the samples. However, the average concentration of those detectable levels was 0.07 mg/m³ and the overall average for all samples including results below the limit of detection was 0.06 mg/m³ where the OSHA PEL is 0.2 mg/m³. While CTPVs levels were detectable, all data were well below the OSHA PEL. Analysis for 15 PNAHs was undertaken on the highest CTPVs samples (i.e., minimum of 0.1 milligram benzene soluble material). The resulting concentrations were below the analytical limits of detection (0.1-0.2 part per billion) for all 15 polynuclear aromatics.

Field survey air monitoring data are summarized in Figure 4.

Figure 4. HAND SPRAY APPLICATION MONITORING RESULTS
Average Airborne Concentration Compared to OSHA Permissible Exposure Limit (PEL)



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Drag Box and Squeegee Machine Application

All airborne concentrations of volatile and semivolatile organics as well as CTPVs were below the analytical limits of detection.

PNAH analyses were not undertaken due to less than detectable CTPVs results (i.e., low

levels of benzene soluble material collected on filter samples). Because the levels of benzene solubles (i.e., CTPVs) were generally at or below the detection limit (i.e., 0.02-0.03 milligram), characterization for individual PNAHs was not feasible.

Field survey air monitoring data are summarized in Figures 5 and 6.

Figure 5. DRAG BOX MONITORING RESULTS
Average Airborne Concentration Compared to OSHA Permissible Exposure Limit (PEL)

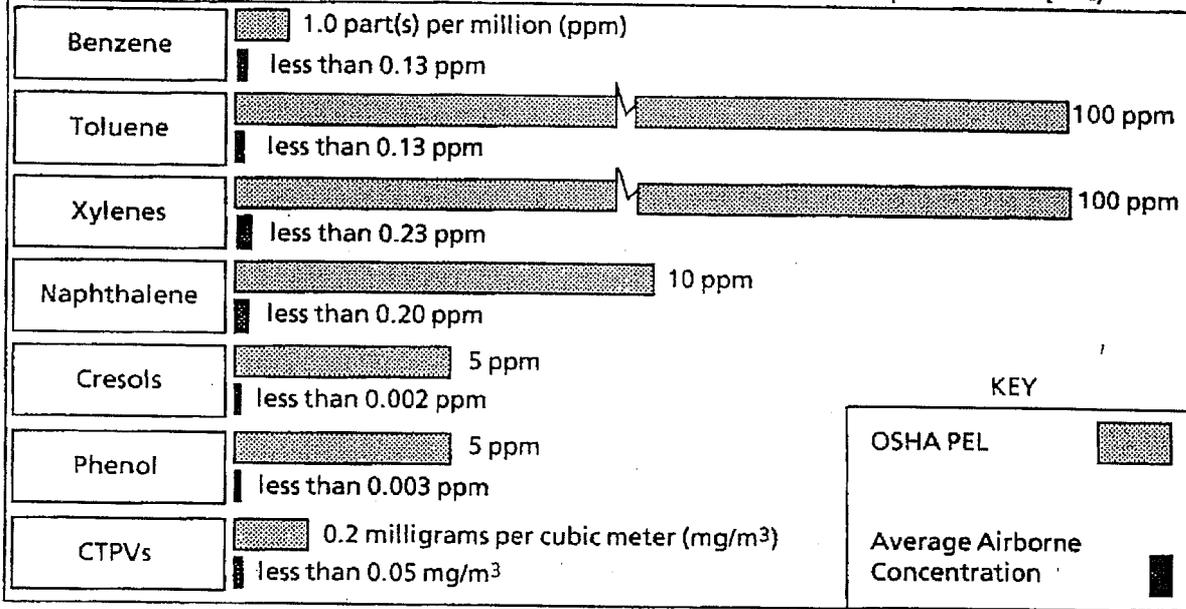
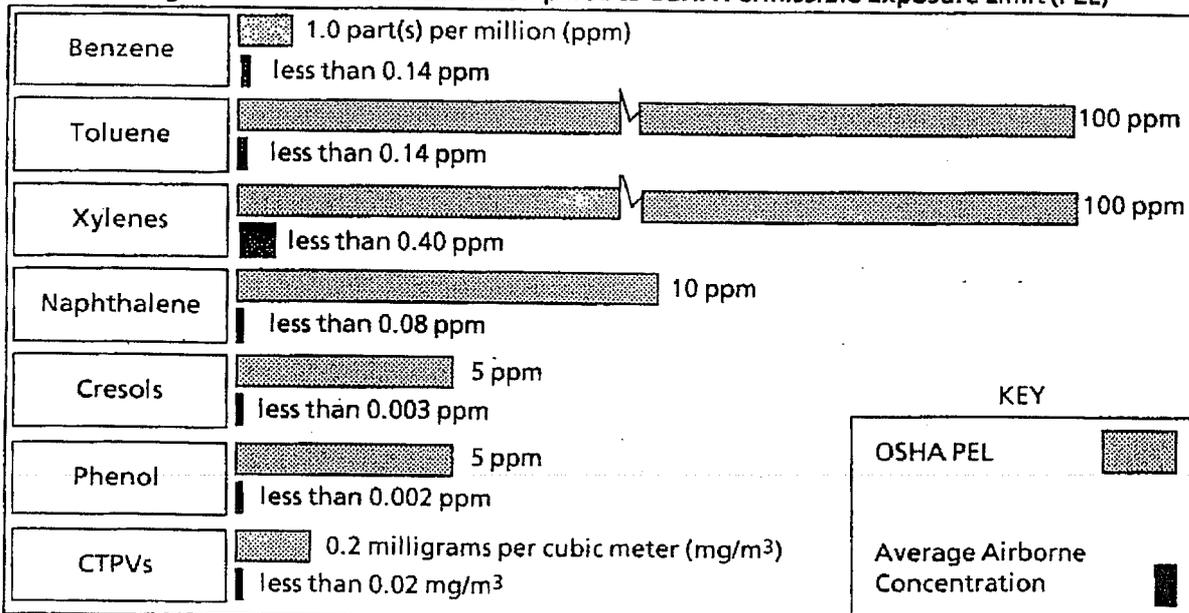


Figure 6. SQUEEGEE MACHINE MONITORING RESULTS
Average Airborne Concentration Compared to OSHA Permissible Exposure Limit (PEL)



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Pail Filling and Truck Loading

With the exception of two benzene results (0.15 ppm - during pail filling) and (0.1 ppm - during truck loading), all airborne data for volatile and semivolatile organics as well as CTPVs were at or below the analytical limits of detection. PNAH analyses were not undertaken due to negligible CTPVs results (i.e., low levels of benzene soluble material collected on filter samples). Because the levels of benzene solubles (i.e., CTPVs) were generally at or below the detection limit (i.e., 0.02-0.03 milligram), characterization for individual PNAHs was not feasible.

The two detectable benzene levels were less than 20% of the permissible limit and were not corroborated by area sample results obtained above the pail filling and bulk loading stations.

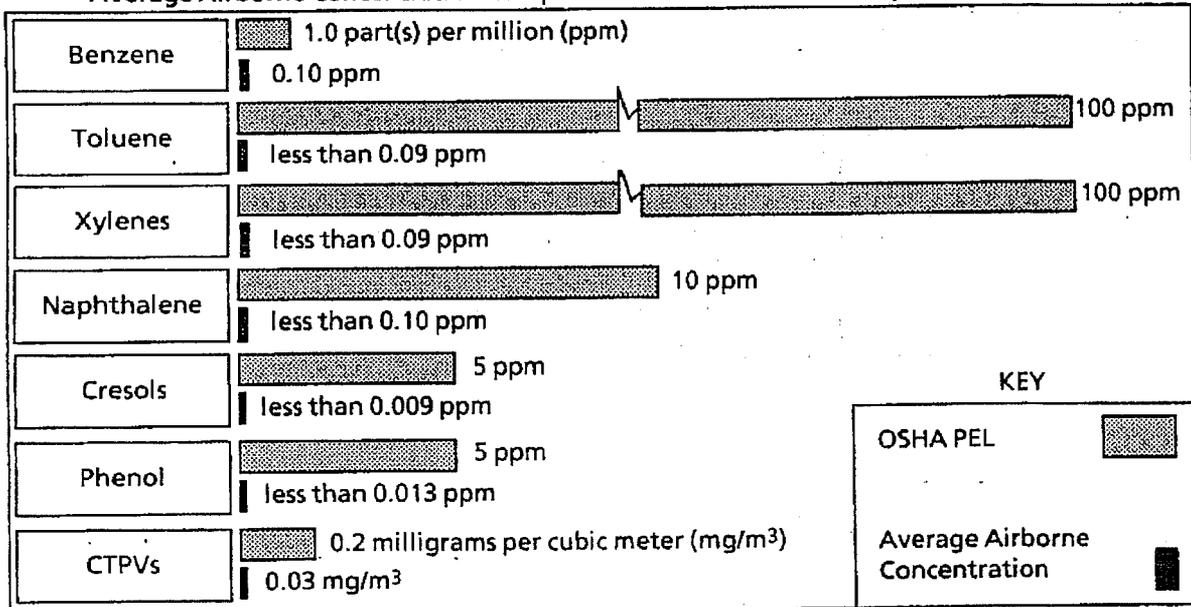
All area samples (pail filling station and bulk loading platform) were nondetectable for benzene where these area samples would be expected to represent worst-case conditions.

Because the personal samples in question were collected on employees with access to other areas of the plant where solvents and various hydrocarbon additives were being handled/repackaged as part of other coating systems, it is postulated that benzene most likely was present as a trace contaminant in a raw material(s) utilized for coatings other than pavement sealer.

All other data, including application results, support the contention of a non-tar and non-pavement sealer trace source of benzene.

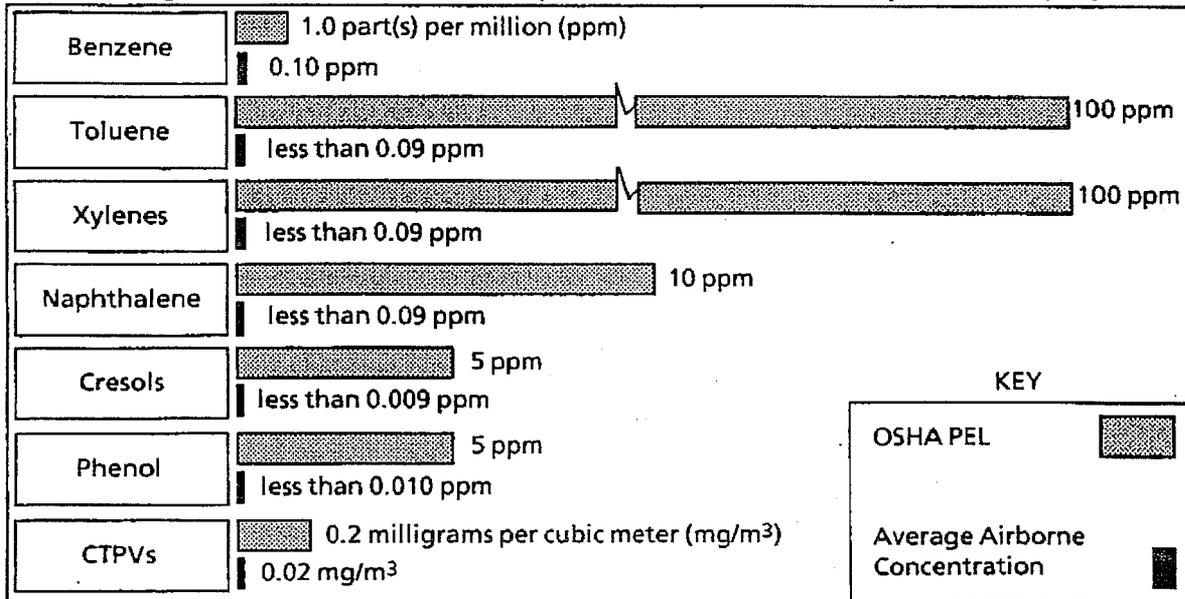
Field survey air monitoring data are summarized in Figures 7 & 8.

Figure 7. PAIL FILLING MONITORING RESULTS
Average Airborne Concentration Compared to OSHA Permissible Exposure Limit (PEL)



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Figure 8. TRUCK LOADING MONITORING RESULTS
Average Airborne Concentration Compared to OSHA Permissible Exposure Limit (PEL)



Emulsion Manufacture (high shear batch mill)

Seventy-five percent (75%) of volatile organic samples were below the analytical limits of detection. Detectable values were reported for benzene, toluene, xylenes and naphthalene ranging from 0.3% to 1.0% of the permissible levels and were not corroborated by area sample results obtained above the batch mill. All area (batch mill) samples were nondetectable for the involved organics where these area samples would be expected to represent worst-case conditions. Given the proximity and simultaneous operation of other coating and patching product manufacturing equipment to the batch emulsion mill, where these other products involved solvents and various hydrocarbon additives, it is felt that the detected volatile organics more than likely originated from raw materials utilized for these aligned products and not pavement sealer. All airborne data, including application results,

support the contention of a non-tar and non-pavement sealer source of volatile organics.

All airborne levels of semivolatile organics were below detectable levels and well below the OSHA PELs.

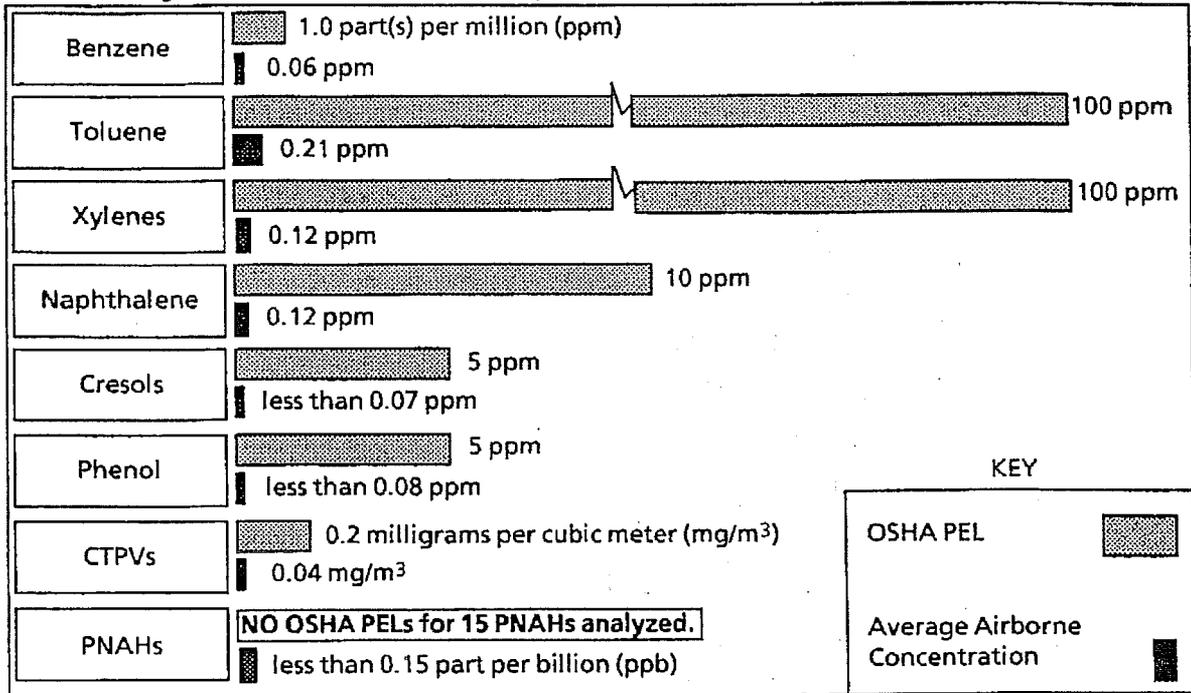
CTPVs were detected on 70% of the samples. The average concentration of those detectable levels was 0.05 mg/m³ and the overall average for all samples including results below the limit of detection was 0.04 mg/m³ where the OSHA PEL is 0.2 mg/m³. While detectable levels of CTPVs were reported, all concentrations were well below the OSHA PEL.

PNAH analyses were undertaken on the highest CTPVs samples (i.e., minimum of 0.1 milligram benzene soluble material). The resulting concentrations were below the average analytical limits of detection (0.15 part per billion) for all 15 polynuclear aromatics.

Field survey air monitoring data are summarized in Figure 9.

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**Figure 9. EMULSION MANUFACTURE (HIGH SHEAR BATCH MILL) MONITORING RESULTS
Average Airborne Concentration Compared to OSHA Permissible Exposure Limit (PEL)**



Sealed Pavement Emissions

Head Space Emissions

With the exception of naphthalene, all airborne data for volatile and semivolatile organics were at or below the analytical limits of detection.

Detectable naphthalene levels were less than 2% of the permissible limit where the average concentration was 0.12 ppm compared to the OSHA PEL of 10 ppm.

CTPVs were present at roughly the limit of detection where the average concentration was 0.03 mg/m³ and the OSHA PEL is 0.2 mg/m³. While detectable levels of CTPVs were reported, concentrations were well below the OSHA PEL. PNAH analyses were not undertaken due to negligible CTPVs results (i.e., low levels of benzene soluble material collected on filter samples). Because the levels of benzene solubles (i.e., CTPVs) were generally at the detection limit (i.e., 0.02-0.03 milligram), charac

terization for individual PNAHs was not feasible.

Field survey air monitoring data are summarized in Figure 10.

Fugitive Emissions

With the exception of naphthalene, all airborne data for volatile and semivolatile organics as well as CTPVs were at or below the analytical limits of detection.

Detectable naphthalene levels were less than 2% of the permissible limit where the average concentration was 0.12 ppm compared to the OSHA PEL of 10 ppm. PNAH analyses were not undertaken due to negligible CTPVs results (i.e., low levels of benzene soluble material collected on filter samples). Because the levels of benzene solubles (i.e., CTPVs) were below the detection limit (i.e., 0.02-0.03 milligram), characterization for individual PNAHs was not feasible.

Field survey air monitoring data are summarized in Figure 11.

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Figure 10. SEALED PAVEMENT MONITORING RESULTS - HEAD SPACE EMISSIONS
Average Airborne Concentration Compared to OSHA Permissible Exposure Limit (PEL)

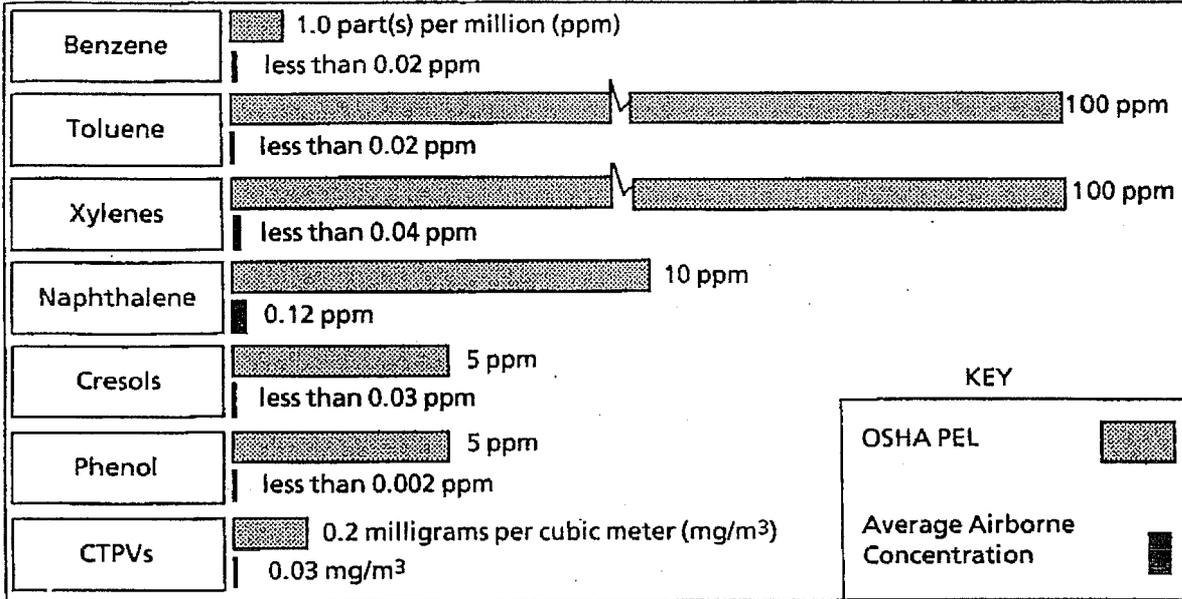
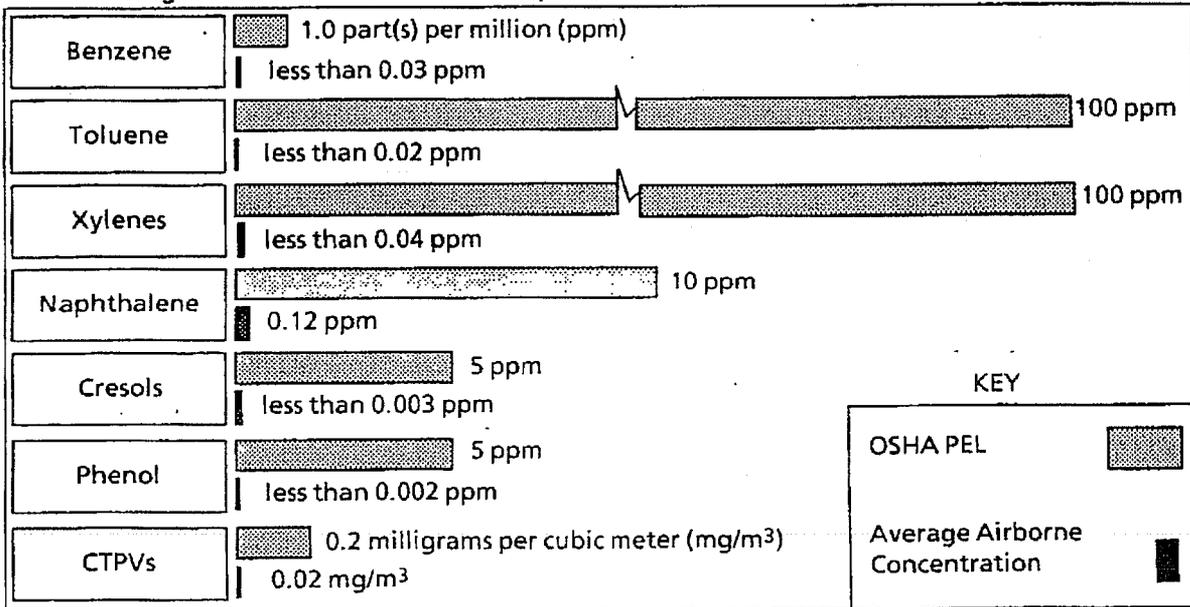


Figure 11. SEALED PAVEMENT MONITORING RESULTS - FUGITIVE EMISSIONS
Average Airborne Concentration Compared to OSHA Permissible Exposure Limit (PEL)



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CONCLUSIONS

Air monitoring data collected under representative field conditions involving a variety of refined coal tar sealer application and handling scenarios indicate emissions during sealer application and manufacture are negligible and well below occupational health exposure limits. Similarly, emissions from sealed pavement during cure out are negligible and of no health consequence for applicators or the general public, including pedestrians and property owners.

Refined coal tar (Grade RT-12) as well as refined coal tar emulsions will continue to be available and are not the subject of any regulatory reviews or bans.

Like most industrial chemicals, coal tar has potentially hazardous properties. These potential hazards are well known and can be controlled by following some simple work practices and using good personal hygiene. Refined coal tar sealer can be used safely by following these simple rules:

- Read the manufacturer's Material Safety Data Sheet and follow the recommendations.
- Avoid prolonged direct contact with skin and eyes. If refined tar or sealer does get on your skin or saturates work clothing, the affected garments should be removed and involved skin areas washed with soap or waterless cleaners.
- Full-length clothing should be worn at all times (i.e., long-sleeved shirts buttoned over the glove cuff, long pants with close fitting cuffs extending below the top of work boots).
- Chemical resistant or liquid repellent gloves should be worn. Cloth gloves will absorb sealer.
- For highly sensitive individuals or where there is the possibility of skin contact and exposure to sunlight, a protective cream formulated for coal tar products or a general purpose protective cream applied in conjunction with a No. 15 sun lotion should be used.

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GLOSSARY OF TERMS

American Industrial Hygiene Association — Professional organization charged with ensuring all aspects of occupational health evaluation are conducted in a scientific, ethical and professional manner.

Analytical Limit of Detection — The smallest amount of a substance that can be determined by a specific analytical method. When a material cannot be detected at this lower limit, values are reported as less than (<) the limit of detection divided by the air sample volume or what is called the volume-adjusted limit of detection. Values reported in this manner should be considered maximum theoretical concentrations and representative of a worst-case value.

ASTM — American Society for Testing and Materials; a scientific and technical organization for the development of standards on characteristics and performance of materials, products, systems, and services.

CTPVs — Coal tar pitch volatiles; a measure of dusts, fumes, mists that are soluble in benzene (i.e., PNAHs) and an index of carcinogenicity. Historically used to evaluate exposure to coke oven emissions, now applied to all coal tar-derived products.

Distillation — A separation process that consists of driving vapors from a hydrocarbon solution by heating, then condensing to a liquid product. Is used for purification and/or fractionation.

Material Safety Data Sheet (MSDS) — A summary document required by law for all chemicals. Provides health, safety and environmental information as well as physical properties.

mg — milligram; a metric unit of weight, in this case, the amount of a material trapped on a specific collection media. There are 1,000 milligrams in one gram (g) of a substance.

m³ — cubic meter; a metric unit of volume, in this case the volume of air passed through a specific collection media. The volume of air contained in an enclosed space roughly 40 inches on all sides.

mg/m³ — Milligrams per cubic meter; a unit for measuring concentrations of particulates

or gases in the air [a weight (in milligrams of contaminant) per unit of volume (in cubic meters of air sampled)].

NIOSH — National Institute for Occupational Safety and Health of the Public Health Service, U. S. Department of Health and Human Services (DHHS); federal agency which, in addition to other activities, tests and certifies respiratory protective devices, air sampling and analytical methods/procedures, recommends occupational exposure limits for various substances and assists OSHA in occupational safety and health investigations and research.

OSHA — Occupational Safety and Health Administration of the U. S. Department of Labor; a federal agency with safety and health regulatory and enforcement authority for most of U. S. industry and business.

PEL — Permissible exposure limit; an exposure limit established by OSHA's regulatory authority. Airborne concentration at which workers would not experience health effects.

PNAHs — Polynuclear Aromatic Hydrocarbons; organic compounds usually composed of three or more carbon rings. It is believed that some of these compounds are capable of causing skin tumor formation upon repeated and prolonged exposure.

ppb — Parts per billion; a unit for measuring the concentration of a gas or vapor in air; parts (by volume) of the gas or vapor in a billion parts of air. Equal to one inch in 16,000 miles or one second in 32 years.

ppm — Parts per million; a unit for measuring the concentration of a gas or vapor in air; parts (by volume) of a gas or vapor in a million parts of air. Equal to one inch in 16 miles or one minute in two years.

Protective Cream — A protective skin cream provides an invisible, flexible protection for the hands from soils, solvents, dusts, powders, oils, greases, paints, epoxies, resins, inks and irritants. It can be easily removed by washing with any cleansing product.

Semivolatile Organics — For purpose of this study, semivolatile organics refers to cresols and phenols.

Volatile Organics — For purposes of this study, volatile organics refers to benzene, toluene, xylenes and naphthalene.

GEMSEAL
Toxicity Characteristic Leaching Procedure (TCLP) Results

COMPONENTS	REGULATORY LIMITS (mg/L) ¹	REFINED TAR K-364 (mg/L) ¹	GEMSEAL #12 FEDERAL C.T.E. (mg/L) ¹
METALS (6010, 7470)			
Arsenic	5.0	<0.20	<1.0
Barium	100.0	<0.10	<1.0
Cadmium	1.0	<0.10	<0.05
Chromium	5.0	<0.10	<1.0
Lead	5.0	<0.10	<1.0
Mercury	0.2	<0.001	<0.002
Selenium	1.0	<0.2	<0.2
Silver	5.0	<0.5	<1.0
VOLATILE ORGANICS (8240)			
Benzene	0.5	0.007	<0.05
Carbon tetrachloride	0.5	<0.005	<0.05
Chlorobenzene	100.0	<0.005	<0.05
Chloroform	6.0	<0.005	<0.05
1,1-Dichloroethene	0.7	<0.005	<0.05
1,2-Dichloroethane	0.5	<0.005	<0.05
Methyl ethyl ketone	200.0	<0.01	<0.10
Tetrachloroethene	0.7	<0.005	<0.05
Trichloroethene	0.5	<0.005	<0.05
Vinyl chloride	0.2	<0.01	<0.10
SEMIVOLATILE ORGANICS (8240)			
Total cresol (non-specific)	200.0	<0.025	0.16
1,4-Dichlorobenzene	7.5	<0.025	<0.025
2,4-Dinitrotoluene	0.13	<0.025	<0.025
Hexachlorobenzene	0.13	<0.025	<0.025
Hexachlorobutadiene	0.5	<0.025	<0.025
Hexachloroethane	3.0	<0.025	<0.025
Nitrobenzene	2.0	<0.025	0.07
Pentachlorophenol	100.0	<0.13	<0.13
Pyridine	5.0	<0.025	0.025
2,4,5-Trichlorophenol	400.0	<0.025	<0.025
2,4,6-Trichlorophenol	2.0	<0.025	<0.025
HERBICIDES (8150)			
2,4-D	10.0	<0.01	<0.01
2,4,5-TP (silvex)	1.0	<0.1	<0.1
PESTICIDES (8080)			
Chlordane	0.03	<0.01	<0.01
Endrin	0.02	<0.001	<0.001
Heptachlor (and its epoxide)	0.008	<0.0005	<0.0005
Lindane	0.4	<0.0005	<0.0005
Methoxychlor	10.0	<0.005	<0.005
Toxaphene	0.5	<0.01	<0.01

Analytical Procedures: A zero headspace extraction (volatiles) was performed in addition to an oil and non-aqueous extraction procedure for nonvolatiles analyses. All extractions were performed via the TCLP Procedure 1311 described in the Federal Register, Vol. 55, No. 61, 3-29-90, pp 11798-11877.

Analytical Method Reference: SW-846, 3rd Edition, 40 CFR, Part 261.

NOTE: All less than values represent the quantitation limit for the method/analytical equipment employed where the involved constituent was not found to be present.

- (1) Milligrams per liter or equivalently parts per million.
- (2) Federal C.T.E., TANK #2, Tampa Facility.



November 3, 2009

To Whom It May Concern:

This is to certify that Gem Seal Fed. Spec. pavement sealer contains **less than 50 grams per liter VOC**, as determined in accordance with California Air Resources Board (CARB) rules for Volatile Organic Compounds (VOC) of Architectural and Industrial Maintenance (AIM) Coatings, revised as of 6/4/08 to become effective 1/1/10. Gem Seal Fed. Spec. pavement sealer meets the criteria defined according to the most restrictive coating category definition [Driveway Sealers] of this regulation, which lists a corresponding VOC limit of 50 grams per liter maximum.

If you have any questions or need further information, please do not hesitate to contact me.

Respectfully submitted,

Geoff Crenson

Technical Manager
Pavement Maintenance Division

ATTACHMENT #4
COAL TAR FREE AMERICA:
INFORMATION SUBMITTAL

Megan Pierce

To: Thomas Ennis
Subject: RE: Winnetka- EFC

Chuck:

Not sure what's up with the links so I will re-paste the response with the links shown in text. This will enable anyone to copy and paste this into a browser if the hot links aren't working. While it kind of looks like I am using myself as a reference a bit, I think you'll find that many of these contain additional source links.

Concerning the Framework A, B, C questions:

Coal Tar Sealers:

A. Is it toxic to humans or the environment? yes, carcinogenic, teratogenic (birth defects), toxic, and mutagenic

1. Carcinogenic

[Coal-tars and Derived products. 1985 International Agency for Research on Cancer \(IARC\) vol 35, 83 p. \(http://www.inchem.org/documents/iarc/vol35/coaltars.html \)](http://www.inchem.org/documents/iarc/vol35/coaltars.html)

This landmark document describes the carcinogenic properties of coal tars and coal-tar pitches, and finds that there is sufficient evidence that coal-tar pitches are carcinogenic in humans.

Williams, E. S.; Mahler, B. J.; Van Metre, P. C. [Coal-tar pavement sealants might substantially increase children's PAH exposures. \(http://www.sciencedirect.com/science/article/pii/S0269749112000279 \)](http://www.sciencedirect.com/science/article/pii/S0269749112000279) Environ. Pollut. 2012.

This "New Initiatives" article in Environmental Pollution estimates that, although dietary ingestion has long been thought to be the primary route of human exposure to polycyclic aromatic hydrocarbons (PAHs), for children 3-5 years of age living in residences adjacent to parking lots with coal-tar-based sealcoat, non-dietary ingestion of PAHs (i.e., ingestion of house dust) is about 2.5 times that of dietary ingestion.

Williams, E. S.; [Polycyclic Aromatic Hydrocarbons and Human Health http://www.youtube.com/watch?v=qIETVVBSKK4&feature=share&list=PL092256775CBEBD8E](http://www.youtube.com/watch?v=qIETVVBSKK4&feature=share&list=PL092256775CBEBD8E). University of Connecticut PAH Seminar, November 2011.

This is a video summary of Dr. Williams' findings.

For the first time, a toxicologist publicly presented the probable risks to children exposed to dust tracked into homes from coal tar pavement sealants. An excess risk of 1 in 10,000 was estimated. Federal law deems this risk "unacceptable" and is "sufficient basis" for action. The professor from Baylor University, Dr. Spencer Williams, stated additional studies are warranted.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, Public Health Service Agency for Toxic Substances and Disease Registry, Division of Health Assessment and Consultation: Health Consultation for [Leander Independent School District](http://www.atsdr.cdc.gov/hac/pha/LeanderIndependentSchoolDistrict/LeanderIndependentSchoolDistrict%20HC%202-13-2008.pdf) (<http://www.atsdr.cdc.gov/hac/pha/LeanderIndependentSchoolDistrict/LeanderIndependentSchoolDistrict%20HC%202-13-2008.pdf>), Proposed Elementary School #19, (Grandview Hills Elementary), Austin, Travis County, Texas, EPA FACILITY ID: TXN000606777, February 13, 2008.

For years it was hoped that the federal government toxicologists would just look at the safety of children exposed to coal tar sealants. A few years ago it was discovered that they already had, but it was coincidental. A school district outside of Austin, Texas (Leander) was looking to build a new elementary school. They purchased a property that met their needs except that it had been a chemical research facility. When parents found out, many were very upset. So upset that they got the attention of their elected officials, who in turn brought in the feds (more specifically the Agency for Toxic Substances and Disease Registry ATSDR, who routinely does this kind of work).

They tested the soil and analyzed the risks. They found relatively high levels (69 mg/kg, but nothing near the highest in pavement dust by the USGS: 3200 mg/kg) of polycyclic aromatic hydrocarbons (PAHs) in the soil near where there were parking lots and the source was determined to be coal tar pavement sealants. The levels were sufficient to increase cancer risk in a low to moderate range if it remained at the proposed site. As a result soils were removed under the description of "remediation."

2. teratogenic (birth defects)

[Effect of Prenatal Exposure to Airborne Polycyclic Aromatic Hydrocarbons on Neurodevelopment in the First 3 Years of Life among Inner-City Children](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1551985/) (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1551985/>) , Environ Health Perspect. 2006 August.

3. toxic

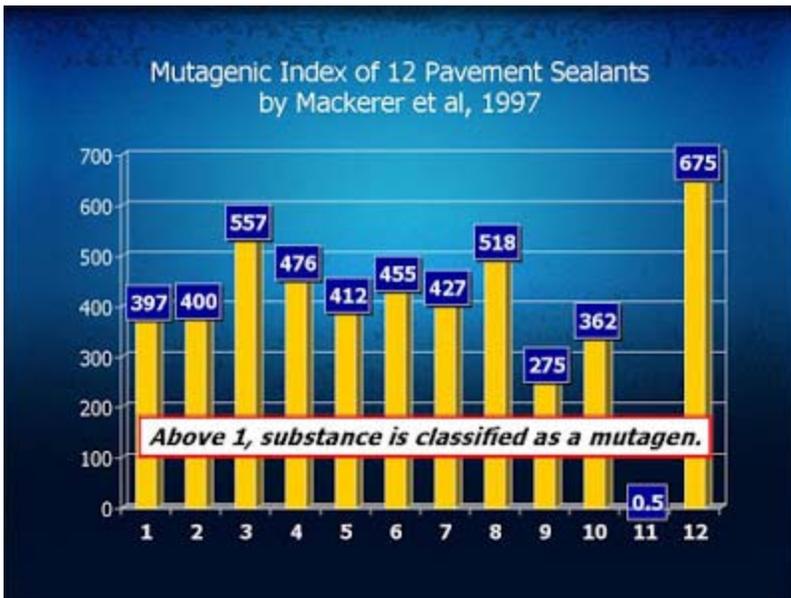
[Coal-tar based pavement sealant toxicity to freshwater macroinvertebrates](http://www.sciencedirect.com/science/article/pii/S0269749109005375) (<http://www.sciencedirect.com/science/article/pii/S0269749109005375>). Bryer, P.J., Scoggins, M., and McClintock, N.L., 2009. Environmental Pollution, v. 158, no. 5, p. 1932-1937.

This scientific journal article reports that exposure to sediment contaminated with coal-tar-based sealcoat resulted in decreased abundance and richness of freshwater macroinvertebrates, an important element in the aquatic food chain.

4. mutagenic

Comparative carcinogenic and mutagenic activity of coal tar and petroleum asphalt paints used in potable water supply systems. <http://www.ncbi.nlm.nih.gov/pubmed/6201525>

Mackerer, C. R. et al; [Mutagenicity and PAC Content of Seal Coatings for Asphalt Pavement](#). 16th International Conference on Polycyclic Aromatic Compounds, November 1997.



We continue to hear some say that coal tar sealants have the toxic ingredients refined out (generally polycyclic aromatic hydrocarbons, PAH). This in spite of the laboratory levels of showing extremely high concentrations.

A few years ago, I came across this research that got little attention when presented back in 1997. It pre-dates any of the current understanding of the problem of coal tar sealants. The lead author is the retired head of the Mobil Corporation's research laboratory. He developed an index to rate the mutagenicity of chemical solutions called the Ames Index. It has been used on other coal or petroleum products as well.

Dr. Mackerer decided to do this study after seeing some college students sealing his neighborhood's driveways. He wondered just how toxic the sealants are. So he went to a hardware store and bought 12 separate products. As the above graph shows, anything above 1.0 is considered a mutagen. The coal tar sealants are an average of about 450! Dr. Mackerer said that while the absolute number can go higher, after a few hundred the real mutagenicity is maxed out .

The only problem with this is that it has never been published, but is only a collection of slides summarizing the team's work.

B. Is it found at concentrations that can have an effect?.

yes, standard effects concentration is 23 ppm and the product can be 70,000 ppm <http://pubs.usgs.gov/fs/2011/3010/pdf/fs2011-3010.pdf>

Does product type really matter? PAH concentrations in the coal-tar-based sealcoat product are about 1,000 times higher than in the asphalt-based product (more than 50,000 milligrams per kilogram [mg/kg] in coal-tar-based products and 50 mg/kg in asphalt-based products [City of Austin, 2005]). Anecdotal reports, such as Web sites, blogs, and comments by industry representatives, indicate that the coal-tar-based product is used predominantly east of the Continental Divide and the asphalt-based product is used predominantly west of the Continental Divide. During 2007–08, the USGS swept dust from sealcoated and unsealcoated parking lots in nine cities across the United States and analyzed the dust for PAHs. For six cities in the central and eastern United States, the median PAH concentration in dust from sealcoated parking lots was 2,200 mg/kg, about 1,000 times higher than in dust from sealcoated parking lots in the western United States, where the median concentration was 2.1 mg/kg. Although both product types are available nationally, these results confirm the regional difference in use patterns (Van Metre and others, 2009).

C. Are those effects unacceptable to the community?

As you know the EPA and others have determined "acceptable risk" for many exposures and risks in our society. By this measure, the use of coal tar pavement sealers is federally "unacceptable."

The article, entitled "[Cancer Risk from Incidental Ingestion Exposure to PAHs Associated with Coal Tar Sealed Pavements](#)," is a further refinement of work led by Dr. Spencer Williams, a toxicologist from Baylor University and co-authored by Drs. Barbara Mahler and Peter Van Metre of the USGS.

The essence of the paper is really contained in this graph. If you take your time to understand it, these are the key points:

- There is some cancer risk from ingestion from background PAH (polycyclic aromatic hydrocarbons) sources that we get from food and the environment, but it is in a risk range that the EPA would review on a case-by-case basis. This is why we frequently hear public service announcements to minimize eating grilled meat and exposure to tobacco smoke (incidental 2nd hand if you will).
- Any exposure scenario from the proximity to coal tar sealed asphalt puts the risk into the zone of "desired remediation" or as stated previously "federally unacceptable."
- Most exposure comes from coal tar sealant contaminated soil instead of indoor dust.
- Early childhood exposure is most troubling, but so is also in the red zone is a lifetime of exposure or even just exposure during adulthood.



Effects are still being learned, but cancer risks to children are similar to second-hand smoke. How does that risk compare to an exposure to cigarettes? A [study published](http://www.ncbi.nlm.nih.gov/pubmed/7729384) (<http://www.ncbi.nlm.nih.gov/pubmed/7729384>) at the National Institutes for Health states the risk of getting lung cancer for a female non-smoker working or living with a smoker is about the same as the risk of getting cancer from a coal tar sealed parking lot!

That is my quick summary of the Framework. I have attached a detailed bibliography of sources on PAHs and human health which I assembled to garner the support of the Chicago Physicians for Social Responsibility, who have endorsed action against the use of this product in Chicago, Texas, Maine and New York.

More on the other email later.

Tom

Trustee Fessler:

Thank you for your thoughtful questions during the July 8th Study Session on this topic. While I am hopeful and encouraged by the general direction of the Board, you may desire a fuller response to garner your confident support.

But please let me briefly introduce myself. After implementing and defending the nation's first ban of this material in Austin, Texas, I saw a growing gap in the understanding on this issue. The EPA, state agencies and environmental organizations appeared disinterested in tackling this paramount pollutant. So I launched this effort, Coal Tar Free America, to advocate and educate about this product, which is done completely on a voluntary basis with no industry funding. A more detailed resume of my experience can be found [here](http://1.bp.blogspot.com/-XhkfAieIhLM/UwSwpSDk6WI/AAAAAAAAADzE/-GnjwFRMGQw/s1600/Tom+Ennis+Infographic.JPG). <http://1.bp.blogspot.com/-XhkfAieIhLM/UwSwpSDk6WI/AAAAAAAAADzE/-GnjwFRMGQw/s1600/Tom+Ennis+Infographic.JPG>

Ironically I have actually done drainage design work in Winnetka in my previous private civil engineering employment in the Chicago area!

After watching the video a few times, it appears you have about seven questions. I will answer them in order except for the first one.

1. FRAMEWORK

You had asked about the framework and perspective on this pollutant. As Winnetka moves forward on many pollutants, how do you discern the priorities? I would suggest the following matrix of thinking for any pollutant source:

- A. Is it toxic to humans or the environment?*
- B. Is it found at concentrations that can have an effect?*
- C. Are those effects unacceptable to the community?*
- D. Can the use or source be controlled in a reasonable way?*

If you run coal tar sealers through this line of questions, and compare the certainty of your answers to any other stormwater pollutant, then it will rise to the top:

Coal Tar Sealers:

- A. yes, carcinogenic, teratogenic (birth defects), toxic, and mutagenic*
- B. yes, standard effects concentration is 23 ppm and the product can be 70,000 ppm*
- C. Effects are still being learned, but cancer risks to children are similar to second-hand smoke and in a range of cancer risk that the EPA classifies as "unacceptable."*
- D. Yes simple substitutes are available (more on that question later).*

2. PROBLEM IN WINNETKA?

This can be looked at from two perspectives: driveway and the watershed.

Each driveway represents a health risk to community. It only takes one driveway to represent a significant health risk. For each child living with a coal tar sealed surface, they are at risk. Since most folks in Winnetka use coal tar, each CT sealed driveway is a problem unto itself. How many is too many? I would submit one is too many with such an inane use of a toxic product.

At the watershed level, one of your neighboring areas, [DuPage County](http://coaltarfreeamerica.blogspot.com/2014/01/chicagoland-home-of-most-toxic-creeks.html), (<http://coaltarfreeamerica.blogspot.com/2014/01/chicagoland-home-of-most-toxic-creeks.html>) has done research at a watershed area and found the greatest frequency of PAH toxicity in their creeks ever recorded in the US. How does that compare to Winnetka? Similar I would submit, but not exact. On the one hand there are more commercial areas and large parking lots in DuPage (increasing CT usage), but on the other hand there are most likely more DIY-types that would only use asphalt based products available from home improvement stores. All in all, it isn't that different.

3. EPA PERSPECTIVE

I get this question a lot. Don't ask me to explain why or the reasonableness of their actions, but here is what the EPA is up to on this:

- *They did their own studies and found CT sealers a problem, but recommended communities pass their own bans.*
- *they give grants to encourage states and regions to cease coal tar use.*
- *they sponsor webinars on the problems of coal tar sealers.*
- *they publish brochures encouraging communities to move away from it*

Here's a link to read [more](http://coaltarfreeamerica.blogspot.com/2012/11/us-epa-releases-new-info-on-coal-tar.html). <http://coaltarfreeamerica.blogspot.com/2012/11/us-epa-releases-new-info-on-coal-tar.html>

4. STATE OF ILLINOIS PERSPECTIVE

A statewide ban bill was heard in committee earlier this year and it failed to get out of committee. I wrote about it [here](http://coaltarfreeamerica.blogspot.com/2014/04/illinois-ban-failsillinoisians.html). <http://coaltarfreeamerica.blogspot.com/2014/04/illinois-ban-failsillinoisians.html>

Why haven't they regulated it? I believe they are still in the dark about the disposal costs of contaminated sediment from detention ponds. The looming cost of over a billion dollars in the Twin Cities region led to the statewide ban in Minnesota. I estimate a similar cost burden awaiting Illinois taxpayers, but very little pond testing has taken place.

5. ASPHALT SEALER AVAILABILITY

While I heard your difficulty in getting a positive response in your survey of applicators, the fact is most sealer manufacturers make both asphalt based and coal tar based products. You can read an industry piece on that [here](http://www.forconstructionpros.com/article/10298662/understanding-sealer-options). <http://www.forconstructionpros.com/article/10298662/understanding-sealer-options>

6. CAPACITY AND COST OF A BAN

I wrote about the ease of doing a coal tar ban based upon my Austin experience, [here](http://coaltarfreeamerica.blogspot.com/2011/08/worry-free-guide-to-implementing-coal.html). (<http://coaltarfreeamerica.blogspot.com/2011/08/worry-free-guide-to-implementing-coal.html>) It isn't very hard to do, but one must be thoughtful in its execution.

The cost/benefit of a ban is prudent pollution prevent. The National Research Council, who advises Congress on scientific matters said of the Austin ban:

[The City of Austin's encounter with coal tar-based asphalt sealants provides an illustration of the types of products contributing toxins to stormwater discharges that could be far better controlled at the production or marketing stage.](http://coaltarfreeamerica.blogspot.com/2011/11/austin-ban-illustrates-prudent.html) (<http://coaltarfreeamerica.blogspot.com/2011/11/austin-ban-illustrates-prudent.html>)

7. IS LOCAL BEST PLACE?

I have worked with some US Congress members on a nationwide ban. Even with some testimonies before Congress on this issue, it has not yet gotten political traction. Yes that would be easiest, but even the sponsor of the bill, Congressman Lloyd Doggett, recently stated that local bans are necessary to embolden state and national efforts. Winnetka represents such an action. I hope you can support that effort.

Please let me know if you have any additional questions.

Tom



While our understanding continues to develop on coal tar sealants, polycyclic aromatic hydrocarbons (PAHs) and human health, occasionally it is good to pull all of what we know together into a succinct summary. That is my hope here.

There are a few studies that have been done directly on coal tar sealants and human health, but many others that either increase our understanding of the concentrations, use, mobility, and bioavailability for coal tar pavement sealants or those that demonstrate the human health effects of PAH. These three categories serve to inform us of the reasonableness of actions to curtail the use and exposure to coal tar pavement sealers.

My contention is that when the facts are laid before us, it presents a compelling reason to stop the use of this product especially in areas where children will be exposed. Some of the information presented below is from a recent summary of research compiled by the USGS as the Edwards Aquifer Authority (Texas) considers a ban of coal tar sealers.

Direct Studies of Human Health and Coal Tar Sealcoat

Williams, E. S.; Mahler, B. J.; Van Metre, P. C. [Coal-tar pavement sealants might substantially increase children's PAH exposures.](#) Environ. Pollut. 2012.

This "New Initiatives" article in Environmental Pollution estimates that, although dietary ingestion has long been thought to be the primary route of human exposure to polycyclic aromatic hydrocarbons (PAHs), for children 3-5 years of age living in residences adjacent to parking lots with coal-tar-based sealcoat, non-dietary ingestion of PAHs (i.e., ingestion of house dust) is about 2.5 times that of dietary ingestion.

Williams, E. S.; [Polycyclic Aromatic Hydrocarbons and Human Health](#). University of Connecticut PAH Seminar, November 2011.

This is a video summary of Dr. Williams' findings.

For the first time, a toxicologist publicly presented the probable risks to children exposed to dust tracked into homes from coal tar pavement sealants. An excess risk of 1 in 10,000 was estimated. Federal law deems this risk "unacceptable" and is "sufficient basis" for action.¹ The professor from Baylor University, Dr. Spencer Williams, stated additional studies are warranted.



Conclusions

Epidemiological and toxicological studies have conclusively demonstrated that exposure to polycyclic aromatic hydrocarbons is associated with a number of long-term adverse health effects, including multiple cancers.

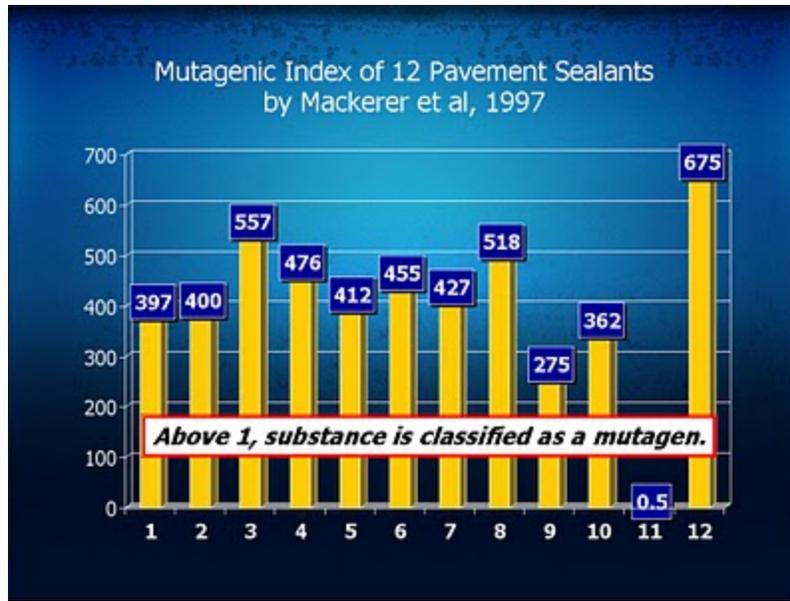
Deterministic and probabilistic risk analysis suggests that exposure to settled house dust and soil affected by coal tar-based pavement sealants generates theoretical excess lifetime cancer risk in excess of 10^{-4} (i.e., 1 in 10,000). The majority of this risk estimate arises from incidental ingestion of CSA-affected soil.

"CSA"-coal tar sealant affected

Legally, Title 40 of the Code of Federal Regulations (CFR) Section 300.430(e)(2)(i)(A)(2) states that an estimate of excess cancer risk associated with a site that exceeds 1×10^{-4} is considered unacceptable. This forms a sufficient basis for EPA to order cleanup. An estimate of the cancer risk associated with a site that is less than 1×10^{-4} but greater than 1×10^{-6} may be considered unacceptable and may be a sufficient basis for ordering cleanup.

from *Site Remediation Planning and Management* by J. Andy Soesilo, Stephanie R. Wilson, p,243¹.

Mackerer, C. R. et al; [Mutagenicity and PAC Content of Seal Coatings for Asphalt Pavement](#). 16th International Conference on Polycyclic Aromatic Compounds, November 1997.



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Mahler, B.J.; Van Metre, P.C.; Crane, J.L.; Watts, A.W.; Scoggins, M.; Williams, E.S., [Coal-tar-based Pavement Sealcoat and PAHs: Implications for the Environment, Human Health, and Stormwater Management. Environ. Sci. Technol., 2012.](#)

This paper compiles the state of our knowledge about the environmental and human health effects of coal tar sealant as well as the status of legislative action has just been published. In addition to the USGS, contributors included the State of Minnesota

Pollution Control Agency, the University of New Hampshire, Baylor University and the City of Austin.

The intent of the report is to present much of what has already been published in one document with new information on human health effects and the volatilization of curing sealant.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, Public Health Service Agency for Toxic Substances and Disease Registry, Division of Health Assessment and Consultation: Health Consultation for [Leander Independent School District](#), Proposed Elementary School #19, (Grandview Hills Elementary), Austin, Travis County, Texas, EPA FACILITY ID: TXN000606777, February 13, 2008.

For years it was hoped that the federal government toxicologists would just look at the safety of children exposed to coal tar sealants. A few years ago it was discovered that they already had, but it was coincidental. A school district outside of Austin, Texas (Leander) was looking to build a new elementary school. They purchased a property that met their needs except that it had been a chemical research facility. When parents found out, many were very upset. So upset that they got the attention of their elected officials, who in turn brought in the feds (more specifically the Agency for Toxic Substances and Disease Registry ATSDR, who routinely does this kind of work).

They tested the soil and analyzed the risks. They found relatively high levels (69 mg/kg, but nothing near the highest in pavement dust by the USGS: 3200 mg/kg) of polycyclic aromatic hydrocarbons (PAHs) in the soil near where there were parking lots and the source was determined to be coal tar pavement sealants. The levels were sufficient to increase cancer risk in a low to moderate range if it remained at the proposed site. As a result soils were removed under the description of "remediation."

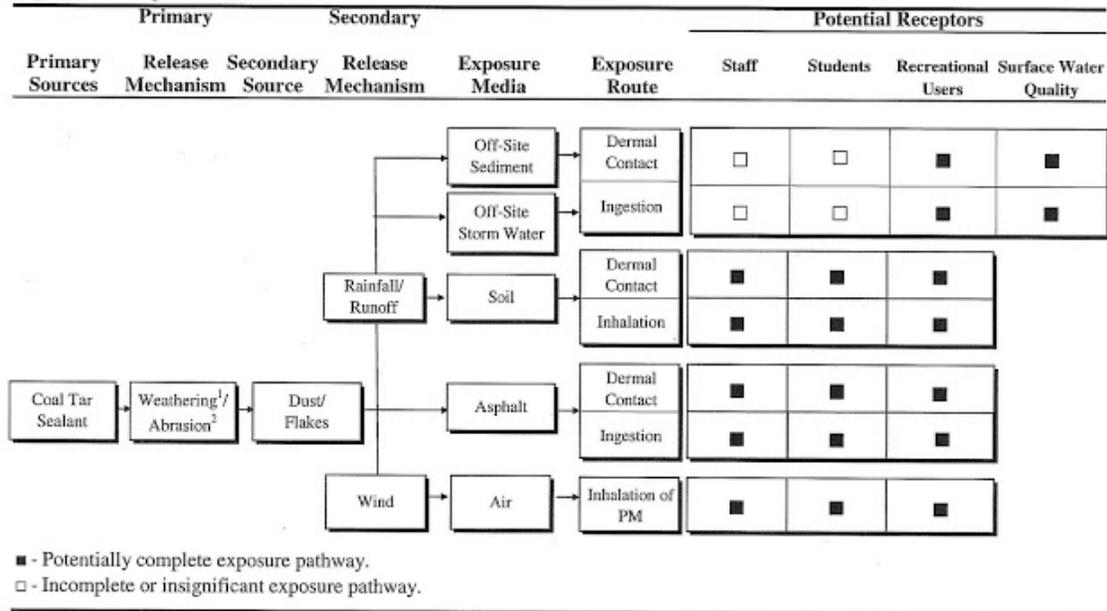
Keifer, K; [Summary of Preliminary Evaluation of Potential Risks from Existing Coal Tar Sealants](#), Environmental Resources Management, Inc. April 2010.

In 2009 the Austin Independent School District (AISD) began to look into this issue at their schools. Below is a link to an interview that was made just as the study was getting started. Since then their toxicologist consultant found that there exist 5 complete CTS exposure pathways from paved surface to child or adult at the school! AISD has since begun a program to prioritize and remove all coal tar sealant remnants from their facilities. They are the first in the nation to do so.

An exposure pathway is defined by the ATSDR as follows:

The route a substance takes from its source (where it began) to its end point (where it ends), and how people can come into contact with (or get exposed to) it. An exposure pathway has five parts: a source of contamination (such as an abandoned business); an environmental media and transport mechanism (such as movement through groundwater); a point of exposure (such as a private well); a route of exposure (eating, drinking, breathing, or touching), and a receptor population (people potentially or actually exposed). When all five parts are present, the exposure pathway is termed a completed exposure pathway.

Figure 2. Conceptual Site Model



Note:

PM = Particulate matter

¹ = Weathering by sun, rain, wind, and freezing.

² = Abrasion by foot traffic, autos, and other site use activities.

Complete Exposure Pathways at Schools from Coal Tar Sealants

[PAHs underfoot: Contaminated dust from coal-tar sealcoated pavement is widespread in the United States.](#) Van Metre, P. C.; Mahler, B. J.; Wilson, J. Environ. Sci. Technol. 2009, 43, (1), 20-25. Environ. Sci. Technol. 2009, 43, (1), 20-25.

This scientific journal article reports that concentrations of PAHs in dust swept from parking lots across the central, southern, and eastern U.S.—where coal-tar-based sealcoat use is most common—are in the 1000s of mg/kg, concentrations similar to those in contaminated soils of USEPA Superfund Sites. Some concentrations found to be 5300 times greater than generic soil screening level (SSL) of 0.09 mg/kg used by the U.S. Environmental Protection Agency Superfund Program.

[Coal-tar-based parking lot sealcoat: An unrecognized source of PAH to settled house dust.](#) Mahler, B. J.; Van Metre, P. C.; Wilson, J. T.; Musgrove, M.; Burbank, T. L.; Ennis, T.; Bashara, T. J., *Environ. Sci. Technol.* 2010, 44, 894-900.

This scientific journal article reports that concentrations of PAHs in house dust in residences adjacent to parking lots with coal-tar-sealcoated pavement were 25 times higher than those in house dust in residences adjacent to parking lots with unsealed pavement or pavement with asphalt-based sealcoat.

Human Health Studies Regarding PAH Effects

[Coal-tars and Derived products. 1985 International Agency for Research on Cancer \(IARC\) vol 35, 83 p.](#)

This landmark document describes the carcinogenic properties of coal tars and coal-tar pitches, and finds that there is sufficient evidence that coal-tar pitches are carcinogenic in humans.

[Association of childhood obesity with maternal exposure to ambient air polycyclic aromatic hydrocarbons during pregnancy.](#) Rundle A, Hoepner L, Hassoun A, Oberfield S, Freyer G, Holmes D, Reyes M, Quinn J, Camann D, Perera F, Whyatt R; *Am J Epidemiol.* 2012 Jun 1;175(11):1163-72. Epub 2012 Apr 13.

The data indicate that prenatal exposure to PAHs is associated with obesity in childhood.

[Prenatal Airborne Polycyclic Aromatic Hydrocarbon Exposure and Child IQ at Age 5,](#) *Pediatrics*, Jul 20, 2009.

Researchers at the Center for Children's Environmental Health (CCCEH) at the Mailman School of Public Health find that exposure to urban air pollution during pregnancy can result in lower IQ in children. Air pollutants known as PAH's (polycyclic aromatic hydrocarbons) mostly come from traffic sources, including burning diesel fuel. Burning tobacco also releases PAHs. The result of burning fossil fuels is now linked to lower IQ, and the effects occur before birth.

[Effect of Prenatal Exposure to Airborne Polycyclic Aromatic Hydrocarbons on Neurodevelopment in the First 3 Years of Life among Inner-City Children,](#) *Environ Health Perspect.* 2006 August.

[Residential Proximity to Freeways and Autism in the CHARGE Study](#), Environ Health Perspect. 2011 June.

Living near a freeway was associated with autism. Examination of associations with measured air pollutants is needed.

Biological and Ecological Health

[The effects of coal tar based pavement sealer on amphibian development and metamorphosis](#). 2006. Bryer, P.J., Elliott, J.N., and Willingham, E.J. , Ecotoxicology, vol. 15(3), 241-247.

*This scientific journal article reports that exposure to sediment contaminated with coal-tar-based pavement sealer resulted in stunted growth and slower development of the frog *Xenopus laevis*.*

[Coal-tar based pavement sealant toxicity to freshwater macroinvertebrates](#). Bryer, P.J., Scoggins, M., and McClintock, N.L., 2009. Environmental Pollution, v. 158, no. 5, p. 1932-1937.

This scientific journal article reports that exposure to sediment contaminated with coal-tar-based sealcoat resulted in decreased abundance and richness of freshwater macroinvertebrates, an important element in the aquatic food chain.

[Occurrence of polycyclic aromatic hydrocarbons below coal-tar-sealed parking lots and effects on stream benthic macroinvertebrate communities](#). Scoggins, M., McClintock, N., Gosselink, L., and Bryer, P., 2007. Journal of the North American Benthological Society, v. 26, no. 4, p. 694-707.

This scientific journal article reports a significant decrease in the health of the ecological community downstream from points of discharge of runoff from coal-tar-sealcoated parking lots relative to ecological communities upstream.

[Toxicity of coal—tar and asphalt sealants to eastern newts, *Notophthalmus viridescens*](#). 2010. Bommarito, T., Spading, D.W., and Halbrook, R.S.

This scientific journal article reports that exposure of eastern newts to sediment contaminated with coal-tarbased sealcoat resulted in deleterious effects, including difficulty right themselves, impaired ability to swim, and diminished liver enzyme activities.

[Toxicity of coal-tar pavement sealants and ultraviolet radiation to *Ambystoma Maculatwn*](#). 2010. Bommarito, T., Sparling, D.W., and Halbrook, R.W.

This scientific journal articles reports that spotted salamanders exposed to sediment contaminated with coal-tar-based sealcoat in sediment had slower rates of growth and diminished ability to swim. Subsequent exposure to ultra-violet radiation resulted in genetic damage.

Coal Tar Sealant Concentrations, Use, and Mobility

[Coal-tar-based pavement sealcoat, polycyclic aromatic hydrocarbons \(PAHs\), and environmental health](#). Mahler, B.J., and Van Metre, P.C., 2011, U.S. Geological Survey Fact Sheet 2011-3010, 6 p. <http://pubs.usgs.gov/fs/2011/3010/>

This USGS fact sheet provides an overview of the ways in which coal-tar-based sealcoat contaminates pavement dust, lake sediment, and house dust.

[Coal-tar-based pavement sealcoat and PAHs: Implications for the environment, human health, and stormwater management](#). Mahler, B.J.; Van Metre, P.C.; Crane, J.L.; Watts, A.W.; Scoggins, M.; Williams, E.S., Environ. Sci. Technol., 2012.

This Feature article in Environmental Science and Technology summarizes the ways in which coal-tar-based sealcoat contaminates stormwater runoff, lake sediment, soil, house dust, and air, and implications for human and biological health and stormwater management.

[Parking lot sealcoat: An unrecognized source of urban PAHs](#). Mahler, B. J.; Van Metre, P. C.; Bashara, T. J.; Wilson, J. T.; Johns, D. A., Environ. Sci. Technol. 2005, 39, (15), 5560-5566.

This article was the first to report the potential for coal-tar-based pavement sealcoat to be an important source of PAH contamination. The study of runoff from 13 parking lots found that concentrations of PAHs in particles in runoff from pavement with coal-tar-based sealcoat was, on average, 65 times higher than concentrations in particles in runoff from unsealed asphalt parking lots.

[Contamination of Stormwater Pond Sediments by Polycyclic Aromatic Hydrocarbons \(PAHs\) in Minnesota](#): The Role of Coal Tar-based Sealcoat Products as a Source of PAHs. Crane, J.L., Grosenheider, K., and Wilson, C.B., 2010, Minnesota Pollution Control Agency, 64 p.

This white paper by the Minnesota Pollution Control Agency describes the filling of stormwater ponds with PAH-contaminated sediments, the expense of depositing of the

sediments, and the likelihood that coal-tarbased pavement sealants are a substantial contributor to the problem.

Concentrations of Polycyclic Aromatic Hydrocarbons (PAHs) and Major and Trace Elements in Simulated Rainfall Runoff from Parking Lots, Austin, Texas, 2003. Mahler, Barbara J.; Van Metre, Peter C.; Wilson, Jennifer T. 2004. USGS OFR 2004-1208. <http://pubs.usgs.gov/of/2004/1208/>

This report was subject to an "Information Quality Act" challenge from the sealcoat industry, to which the USGS responded. A press release summarized the USGS response. <http://www.usgs.gov/newsroom/article.asp?ID=1642&from=rss#.UI3JisXR7tA>. This USGS report provides the data used in Mahler et al., 2005.

[Trends in Hydrophobic Organic Contaminants in Lake Sediments Across the United States, 1970-2001](#). Van Metre, P.C. and Mahler, B.J., 2005. Environ. Sci. Technol., v. 39, no. 15, p. 5567-5574.

This scientific journal article documents upwards trends in PAH contamination in sediment in urban lakes across the United States.

[PAHs underfoot: Contaminated dust from coal-tar sealcoated pavement is widespread in the United States](#). Van Metre, P. C.; Mahler, B. J.; Wilson, J. Environ. Sci. Technol. 2009, 43, (1), 20-25. Environ. Sci. Technol. 2009, 43, (1), 20-25.

This scientific journal article reports that concentrations of PAHs in dust swept from parking lots across the central, southern, and eastern U.S.—where coal-tar-based sealcoat use is most common—are in the 1000s of mg/kg, concentrations similar to those in contaminated soils of USEPA Superfund Sites.

[Polycyclic aromatic hydrocarbons in stormwater runoff from sealcoated pavements](#). Watts, A.W., Ballesterro, T.P., Roseen, R.M., and House, J.P., Environ. Sci. Technol. 2010, v. 44(23), 8849-8854.

This scientific journal article reports that even partial coverage of a drainage area by coal-tar-based sealant resulted in increased PAH concentrations in sediment. A stormwater swale receiving runoff from both sealed and unsealed lots had PAH concentrations 25 times higher after sealant was applied than prior to sealant application.

[Influence of coal-tar sealcoat and other carbonaceous materials on polycyclic aromatic hydrocarbon loading in an urban watershed](#). Yang, Y., Van Metre, P.C., Mahler, B.J.,

Wilson, J.T., Ligouis, B., Razzaque, M.M., Schaeffer, D.J., and Werth, C.J., 2010.: Environ. Sci. Technol., v. 44, p. 1217-1223.

This scientific journal article reports research using organic petrography to quantitatively determine the proportion of PAHs in dust and soil samples originating as coal-tar pitch. The study found that coal-tar pitch, used in coal-tar-based sealcoat, was a dominant source of PAHs in the watershed, contributing as much as 99% of the PAHs in sealed parking lot dust, 92% in unsealed parking lot dust, 88% in commercial area soil, 71% in streambed sediment, and 84% in surficial lake sediment.

[Contribution of PAHs from Coal-Tar Pavement Sealcoat and Other Sources to 40 U.S. Lakes.](#) Van Metre, P. C.; Mahler, B. J. Sci. of the Total Environ., 2010, v.409, 334-344.

This scientific journal article reports that coal-tar-based sealcoat was, on average, the largest source of PAHs to sediment in 40 U.S. lakes, on the basis of a statistical source-apportionment approach. The article also reported that coal-tar-based sealcoat was the source of upward trends in PAH concentrations in seven of eight urban lakes investigated.

[Volatilization of polycyclic aromatic hydrocarbons from coal-tar-sealed pavement.](#) Van Metre, P. C.; Majewski, M. S.; Mahler, B. J.; Foreman, W. T.; Braun, C. L.; Wilson, J. T.; Burbank, T. Chemosphere, 2012.

This scientific journal article reports PAH releases to air from in-use parking lots with and without coal-tar-based sealcoat. The mass of PAHs released to air per unit area of coal-tar-sealed pavement was 60 times greater than that released from unsealed asphalt pavement, even though in all but one case the sealant had been applied from 3 to 8 years prior to sampling.

[PAH volatilization following application of coal-tar-based pavement sealant.](#) Van Metre, P. C.; Majewski, M. S.; Mahler, B. J.; Foreman, W. T.; Braun, C. L.; Wilson, J. T.; Burbank, T. Atmos. Environ. 2012.

This scientific journal article reports enormous releases of PAHs to the atmosphere (one-quarter to one-half of the PAHs contained in the product) during the 15 days following application of coal-tar-based sealant. The authors estimate that PAH emissions from new coal-tar-based sealcoat applications each year (~1000 Mg) are larger than annual vehicle emissions of PAHs for the United States.



DEPARTMENT OF PUBLIC HEALTH
CITY OF CHICAGO

**Department of Public Health Testimony
Committee on Finance
June 7, 2013, 10:00 AM**

Good morning Chairman Burke and committee members. My name is Dr. Cortland Lohff, and I am the Medical Director for Environmental Health at the Chicago Department of Public Health.

The Chicago Department of Public Health supports the proposed ordinance to prohibit the sale and use of coal tar sealants. CDPH believes the research warrants the attention of policy makers and it provides a solid evidence base for the proposed ban or other measures to address the adverse health impact of coal tar sealants.

Coal tar is a byproduct of the coking of coal for the steel industry and coal tar pitch, which makes up about 20 to 35 percent of coal-tar-based sealcoats, is itself 50 percent or more polycyclic aromatic hydrocarbons (PAHs) by weight. According to the U.S. Environmental Protection Agency, PAHs are of concern because several are toxic, carcinogenic, mutagenic and/or teratogenic to aquatic life and seven are probable human carcinogens.

Coal tar based sealants are commonly applied to parking lots, residential driveways and playgrounds. According to a United States Geological Survey (USGS) study, apartments with coal tar-based sealcoats on the parking lot had much higher concentrations of PAHs, both in indoor dust and in parking lot dust, than apartments with parking lots with other surfaces.

The USGS is not alone in its concern. The evidence base for banning coal tar sealants is growing rapidly. For example, a study just published in the *Journal of Exposure Science & Environmental Epidemiology* confirms the heightened fetal susceptibility to prenatal PAH exposure.¹ The authors conclude PAH exposure should be a matter of public health concern.¹ Another study, published in *Environmental Science & Technology*, indicates that the presence of coal-tar-based pavement sealants is associated with significant increases in estimated excess lifetime cancer risk for nearby residents. Much of this calculated excess risk arises from exposures to PAHs in early childhood (*i.e.*, 0–6 years

¹ **The relationship between prenatal exposure to airborne polycyclic aromatic hydrocarbons (PAHs) and PAH-DNA adducts in cord blood.** *J Expo Sci Environ Epidemiol.* (Jan. 9, 2013). [e-publication ahead of print]

of age).² Yet another study, also published in *Environmental Science & Technology*, indicates that even a small amount of seal coated pavement can be the dominant source of PAHs to sediment in storm water-retention ponds;³ proper disposal of such PAH-contaminated sediment can be extremely costly.³ Authors concluded by noting that several local governments, the District of Columbia, and the State of Washington have banned use of these products, and several national and regional hardware and home-improvement retailers have voluntarily ceased selling them.³ All three of these studies were published in just the last year, which underscore our rapid and emerging awareness of a need for policy makers to develop policy regarding the sale and use coal tar.

There are currently no U.S. health-based guidelines for chronic exposure to PAHs. The only guideline available is one from the German Federal Environment Agency Indoor Air Hygiene Commission which advises minimizing exposure to concentrations of a certain type of PAH benzoapyrene greater than 10 mg/kg in dust to avoid adverse health effects.

According to the USGS, PAHs are increasing in urban lakes across the United States, which has prompted several cities, counties and states to have placed restrictions or discontinued the use of coal-tar sealants. The Village of Lake in the Hills, Illinois and Spring Grove, Illinois has enacted restrictions on government use of coat tar sealants. South Barrington, Illinois and 28 cities in Minnesota have implemented a ban on coal tar sealants.

The Department can also provide a list of additional citations for peer-reviewed literature related to coal tar.

² E. Spencer Williams, Barbara J. Mahler, Peter C. Van Metre. “**Cancer Risk from Incidental Ingestion Exposures to PAHs Associated with Coal-Tar-Sealed Pavement.**” *Environ. Sci. Technol.*, 2013, 47 (2), 1101–1109.

³ Mahler et al, **Coal Tar-Based Pavement Sealcoat and PAHs: Implications for the Environment, Human Health, and Stormwater Management**, *Environmental Science and Technology* (2012), Vol. 46, 3039-3045.

ADDITIONAL RESOURCES

Bryer et al, **Coal Tar-Based Pavement Sealant Toxicity to Freshwater Macroinvertebrates**, Environmental Pollution (2010) Vol. 158, pg. 1932-1937.

LaVista and Mahler, **Coal Tar Sealcoats a Major Source of PAHs to Air and to Children Living Nearby**, United States Geological Survey, February 13, 2012.

Mahler et al, **Coal Tar-Based Parking Lot Sealcoat: an Unrecognized Source of PAH to Settled House Dust**, Environmental Science and Technology (2010), Vol. 44 No. 3, pg. 894-900.

Murakami et al, **Modeling of Runoff Behavior of Particle-Bound Polycyclic Aromatic Hydrocarbons (PAHs) from Roads and Roofs**, Water Research (2004), Vol.38 pg. 4475-4483.

Van Metre et al, **Contributions of PAHs from Coal Tar Pavement Sealcoat and Other Sources to 40 U.S. Lakes**, Science of the Total Environment (2010) Vol. 409, pg.334-344.

Van Metre et al, **PAHs Underfoot: Contaminated Dust from Coal Tar Sealcoated Pavement is Widespread in the United States**, Environmental Science and Technology (2009), V.43 No.1, pg. 20-25.

Williams et al, **Coal Tar Pavement Sealants Might Substantially Increase Children's PAH Exposure**, Environmental Pollution, 164 (2012) pg. 40-41.

Yaning et al, **Influence of Coal Tar Sealcoat and Other Carbonaceous Materials on Polycyclic Aromatic Hydrocarbon Loading in an Urban Watershed**, Environmental Science and Technology (2010), Vol. 44, pg. 1217-1223.



Agenda Item Executive Summary

Title: Intergovernmental Agreement with MWRD – Northwest Winnetka Stormwater Funding

Presenter: Steven M. Saunders, Director of Public Works/Village Engineer

Agenda Date: 08/19/2014

Consent: YES NO

Ordinance
 Resolution
 Bid Authorization/Award
 Policy Direction
 Informational Only

Item History:

2014 Capital Budget

Executive Summary:

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is a regional governmental agency with responsibility for general supervision of stormwater management in Cook County. In 2013, the MWRD announced its intention to financially partner with municipal agencies in constructing local stormwater improvements and solicited “shovel-ready” projects for possible funding consideration. The Village submitted several projects, and the MWRD has agreed to provide \$2,000,000 towards the Village's Northwest Winnetka Stormwater Improvements. The MWRD and Village staff have developed an Intergovernmental Agreement (IGA) to administer the MWRD’s funding of the Village’s improvements. The IGA has been reviewed through several versions by MWRD’s legal staff and the Village Attorney, and is shown in Attachment #1. The MWRD Board of Commissioners approved the IGA at its August 7, 2014 Board meeting.

Following approval of the IGA, the Village will finalize bidding documents and advertise for construction bids. Staff intends to provide an award recommendation to the Council in late September or early October. Construction will begin with the pond outlet, however, it is anticipated that the material ordering and fabrication time for the box culvert and outlet sections will take 8-10 weeks, meaning construction will commence in late 2014.

Recommendation:

Consider authorizing the Village President to sign the INTERGOVERNMENTAL AGREEMENT BY AND BETWEEN THE VILLAGE OF WINNETKA AND THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO FOR DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE OF NEW STORM SEWERS AND BERMS IN NORTHWEST WINNETKA, providing \$2 million to the Village of Winnetka for construction of the Northwest Winnetka Stormwater Improvement project.

Attachments:

Agenda Report
Intergovernmental Agreement

Agenda Report

Subject: **Intergovernmental Agreement with MWRD – Northwest Winnetka Stormwater Funding**

Prepared By: Steven M. Saunders, Director of Public Works/Village Engineer

Date: August 12, 2014

Background

The Metropolitan Water Reclamation District of Greater Chicago (MWRD) is a regional governmental agency with responsibility for general supervision of stormwater management in Cook County. In 2013, the MWRD announced its intention to financially partner with municipal agencies in constructing local stormwater improvements and solicited “shovel-ready” projects for possible funding consideration. The Village submitted several projects and was notified that its proposed Northwest Winnetka improvements were being considered for possible funding.

In order for the MWRD to provide funding, the State legislation providing it with stormwater management authority needed to be amended to specifically allow provision of grant funding to local agencies. The amendment process took many months, but Public Act 098-0652 was approved on June 18, 2014, specifically authorizing the MWRD to plan, manage, implement, and finance local activities relating to stormwater management in Cook County. Following passage of the Act, the MWRD and Village staff began developing an Intergovernmental Agreement (IGA) to administer the MWRD’s funding of the Village’s improvements. The IGA has been reviewed through several versions by MWRD’s legal staff and the Village Attorney, and is shown in **Attachment #1**.

Key components of the IGA follow:

1. The MWRD has agreed to provide \$2,000,000 towards the project, which has a cost projection of about \$4.6 million - including a bidding contingency in case the MWRD’s procurement policies affect the bidding environment. (Article 2.10)
2. The MWRD has required that its procurement policies, including prevailing wage requirements and affirmative action requirements, be included in the Village’s bidding documents. The Village has obtained and reviewed these documents and included them in the project bidding specifications. (Articles 2.7, 2.8)
3. The MWRD has authority to review and comment on the proposed construction plans prior to bidding. The plans have been submitted to MWRD for review and MWRD’s comments appear to be minor, not affecting project scope of cost. (Articles 2.4, 2.5)
4. The MWRD has required that an Operation and Maintenance plan be submitted for approval. The Village submitted the required plan, which has been approved by the MWRD. The plan commits the Village to an annual inspection of the

system and the outlet to the Forest Preserve pond, and regular inspection of street inlets for debris or blockages. (Article 5.1)

5. In the event that the Village fails to operate or maintain the project, the MWRD can cause necessary maintenance to be performed, at the Village's expense, or ultimately may demand that some or all of the project funding be returned to the MWRD. (Articles 5.5, 5.6)

The MWRD Board of Commissioners approved the IGA at its August 7, 2014 Board meeting.

Project implementation schedule

Following approval of the IGA, the Village will finalize bidding documents and advertise for construction bids. Staff intends to provide an award recommendation to the Council in late September or early October. Construction will begin with the pond outlet, however, it is anticipated that the material ordering and fabrication time for the box culvert and outlet sections will take 8-10 weeks, meaning construction will commence in late 2014.

Recommendation:

Consider authorizing the Village President to sign the **INTERGOVERNMENTAL AGREEMENT BY AND BETWEEN THE VILLAGE OF WINNETKA AND THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO FOR DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE OF NEW STORM SEWERS AND BERMS IN NORTHWEST WINNETKA**, providing \$2 million to the Village of Winnetka for construction of the Northwest Winnetka Stormwater Improvement project.

Attachments:

1. Intergovernmental Agreement

**INTERGOVERNMENTAL AGREEMENT BY AND BETWEEN THE VILLAGE OF
WINNETKA AND THE METROPOLITAN WATER RECLAMATION DISTRICT OF
GREATER CHICAGO FOR DESIGN, CONSTRUCTION, OPERATION AND
MAINTENANCE OF NEW STORM SEWERS AND BERMS IN NORTHWEST
WINNETKA**

THIS INTERGOVERNMENTAL AGREEMENT (hereinafter the “Agreement”) entered into, by and between the Metropolitan Water Reclamation District of Greater Chicago, a unit of local government and body corporate and politic, organized and existing under the laws of the State of Illinois (hereinafter the “MWRDGC”) and the Village of Winnetka, a municipal corporation and home rule unit of government organized and existing under Article VII, Section 6 of the 1970 Constitution of the State of Illinois (hereinafter the “Village”).

WITNESSETH:

WHEREAS, on November 17, 2004, the Illinois General Assembly passed Public Act 093-1049 (hereinafter the “Act”); and

WHEREAS, the Act declares that stormwater management in Cook County shall be under the general supervision of the MWRDGC; and

WHEREAS, the Act, as amended on June 18, 2014 by Public Act 098-0652, specifically authorizes the MWRDGC to plan, manage, implement, and finance local activities relating to stormwater management in Cook County; and

WHEREAS, the Act further authorizes the MWRDGC to assume responsibility for maintaining any stream within Cook County;

WHEREAS, the Village is located within the boundaries of Cook County; and

WHEREAS, pursuant to Article 11 of the Illinois Municipal Code, 65 ILCS 5/11, the Village has the authority to improve and maintain waterways within its corporate limits; and

WHEREAS, the Village proposes to install new storm sewers and berms in northwest Winnetka to reduce flooding; and

WHEREAS, the Village intends to perform the design, construction, operation and maintenance of the new storm sewers and berms in northwest Winnetka; and

WHEREAS, the Village's proposed plans for installing new storm sewers and berms in northwest Winnetka may be approached more effectively, economically, and comprehensively with the Village and MWRDGC cooperating and using their joint efforts and resources; and

WHEREAS, the Intergovernmental Cooperation Act, 5 ILCS 220/1 *et seq.*, and Section 10 of Article VII of the Illinois Constitution, allow and encourage intergovernmental cooperation; and

WHEREAS, on August 7, 2014, the MWRDGC's Board of Commissioners authorized the MWRDGC to enter into an intergovernmental agreement with the Village; and

WHEREAS, on August 19, 2014 the Village Council authorized the Village to enter into an intergovernmental agreement with the MWRDGC; and

NOW THEREFORE, in consideration of the matters set forth, the mutual covenants and agreements contained in this agreement and, for other good and valuable consideration, the Village and MWRDGC hereby agree as follows:

Article 1. Incorporation of Recitals. The recitals set forth above are incorporated herein by reference and made a part hereof.

Article 2. Scope of Work.

1. The work contemplated by this Agreement will include design, construction, operation, and maintenance of the new storm sewers and berms in northwest Winnetka in the Village (hereinafter the "Project"), as depicted on Exhibit 1.
2. The Village, at its sole cost and expense, shall cause to be prepared construction drawings, specifications, and details (hereinafter "Construction Documents") for the Project.
3. The Project shall realize the public benefit of helping to reduce the risk of flooding in the general area tributary to the new storm sewers and berms in northwest Winnetka (the "Public Benefit").

4. The Village shall provide the MWRDGC with a copy of the Construction Documents prior to bidding the Project for the MWRDGC's approval as to the Project's intended Public Benefit.
5. The MWRDGC shall review and provide comments to the Village as to the Project's intended Public Benefit in writing within 14 calendar days of receipt of the Construction Documents referenced in Article 2, Subsection 2. The Village's incorporation of the MWRDGC's review comments into the Construction Documents shall not be unreasonably withheld.
6. The Village, at its sole cost and expense, shall construct the Project in accordance with the final Construction Documents.
7. The Village will award all Project-related construction contracts using the MWRDGC's Purchasing Act, 70 ILCS 2605/11.1-11.24, the MWRDGC's Multi-Project Labor Agreement and Memorandum of Understanding, as well as the MWRDGC's Affirmative Action Requirements and Affirmative Action Ordinance (attached as Exhibits 2, 3, and 4 respectively) as minimum requirements. The Village may impose more stringent requirements than those contained in Exhibits 2, 3, and 4 when awarding Project-related construction contracts, but in no event shall the Village's requirements fall below the MWRDGC's general standards. The Village need not include the attached Exhibits 2, 3, and 4 as part of their bid documents. However, the Village is responsible for ensuring that these minimum standards are met.
8. The Village shall comply with the Prevailing Wage Act, 820 ILCS 130/0.01 *et seq.* Current prevailing wage rates for Cook County are determined by the Illinois Department of Labor. The prevailing wage rates are revised by the Illinois Department of Labor and are available on the Department's official website. It is the responsibility of the Village to obtain and comply with any revisions to the rates should they change throughout the duration of the Agreement.
9. The Village, at its sole cost and expense, shall provide final project design, land acquisition and remediation, and construction oversight and administrative support for the Project.
10. The MWRDGC shall reimburse the Village for 50.0% of the Project cost, but in no event shall that amount exceed two million and NO/100 Dollars (\$2,000,000.00)("Maximum

Reimbursement Amount"). All reimbursement provided by the MWRDGC shall be used exclusively for the construction of the Project, including the cost of acquiring easements and parcels of real property necessary for the completion of the Project. For purposes of this Agreement, "construction" shall mean all work necessary to build the Project as depicted in the Construction Documents. The Village shall be solely responsible for change orders, overruns or any other increases in cost of the Project. The MWRDGC shall disburse funds to the Village in accordance with the following schedule:

- a. Up to 25% of the Maximum Reimbursement Amount at receipt of invoices for 25% completion of construction;
 - b. Up to 25% of the Maximum Reimbursement Amount at receipt of invoices for 50% completion of construction;
 - c. Up to 25% of the Maximum Reimbursement Amount at receipt of invoices for 75% completion of construction; and
 - d. Subject to the Maximum Reimbursement Amount, the remaining amount necessary to reimburse the Village for 50% of the total Project cost shall be paid at receipt of invoices for final completion and after final inspection by the MWRDGC.
11. As of the date the Village executed this Agreement, the Village has spent approximately \$224,729 on engineering, property acquisition, and other design-related project costs. The Village will also contribute approximately \$2,643,000 towards total construction costs, including construction inspection.
 12. As a condition for reimbursement, the Village shall submit copies of construction invoices to the MWRDGC for the MWRDGC's review and approval, such approval not to be unreasonably withheld.
 13. The MWRDGC will only pay invoices submitted in strict accordance with the schedule set forth in subsection 10 of this Article. The Village shall submit invoices for the representative percentage of construction within thirty (30) calendar days of meeting its respective completion percentage.
 14. The Village shall return all funds provided by the MWRDGC if the Project is not completed within two years of award of the construction contract, unless the MWRDGC approves extension(s); such approvals shall not be unreasonably withheld. In the event

that the Village does not use all of the MWRDGC's disbursed funds for the Project, the Village shall return any unused funds to the MWRDGC within sixty (60) days.

Article 3. Permits and Fees.

1. Federal, State, and County Requirements. The Village shall obtain all federal, state, and county permits required by law for the construction of the Project, and shall assume any costs in procuring said permits. Additionally, the Village shall obtain all consents and approvals required by federal, state, and/or county regulations for the construction of the Project, and shall assume any costs incurred in procuring all such consents and approvals.
2. Maintenance. The Village shall obtain any and all permits necessary for the performance of any maintenance work associated with the improvements to be constructed by the Village in connection with the Project as set forth in the Operations and Maintenance Plan (hereinafter the "O&M Plan"), and in accordance with Article 5 of this Agreement.

Article 4. Property Interests.

1. Prior to construction, the Village shall make best efforts to acquire from property owners any temporary or permanent easements, license agreements, or fee simple title necessary for construction of, maintenance of, and access to the Project.
2. Should acquisition of property interests via condemnation be necessary, the Village shall incur all associated costs, including purchase price and/or easement fee as well as any attorneys' fee.
3. The Village shall record all easements, licenses or deeds acquired for the Project.
4. Whereupon the Village acquires permanent easements for maintenance and access from property owners, the rights and obligations for maintenance and access shall be shared by the MWRDGC and the Village, however, in no event shall this provision be construed in contradiction to the provisions in Article 5 below, whereby the maintenance costs and obligations shall be the sole responsibility of the Village.
5. Nothing in this Agreement shall be construed as creating an ownership interest for the MWRDGC in any of the improvements constructed pursuant to this Agreement.

Article 5. Maintenance.

1. The Village shall prepare an O&M Plan for the improvements to be constructed by the Village in connection with the Project, which shall be submitted by the Village along with the construction documents to the MWRDGC for review as required in Article 2.
2. The Village, at its sole cost and expense, shall perpetually inspect and maintain the new storm sewers and berms in northwest Winnetka, and any other appurtenances associated with this Project, in keeping with the O&M Plan.
3. The Village shall conduct annual inspections to ensure maintenance in accordance with the O&M Plan. The Village shall prepare a report detailing its annual inspection, observations and conclusions. including whether the Project is operating as designed, functioning, and providing the intended Public Benefit. The annual inspection report shall be stamped by a Professional Engineer licensed by the State of Illinois. The stamped annual inspection report shall be provided to the MWRDGC within thirty (30) days of completion
4. The MWRDGC shall have the right (including any necessary right of access) to conduct, at its sole cost and expense, its own annual inspection of the constructed Project upon reasonable notice to the Village.
5. In the event of failure of the Village to maintain the Project in accordance with the O&M Plan, the MWRDGC may issue a thirty (30) day written notice by certified or registered mail to the Village directing the Village to perform such maintenance. If maintenance has not been accomplished on or before thirty (30) days after such notice, the MWRDGC may cause such maintenance to be performed at a cost in conformance with MWRDGC procurement practices and the Village shall pay the MWRDGC the entire cost the MWRDGC incurred to perform the maintenance set forth in the O&M Plan.
6. In the event of failure of the Village to operate the Project to provide the intended Public Benefit, the MWRDGC may demand that some or all of the funding it provided under this Agreement be returned to the MWRDGC.
7. In performing their obligations under this Article, the Village shall comply with all access restrictions and notice requirements set forth in the easements, licenses or deeds recorded pursuant to Article 4 of this Agreement.

Article 6. Notification.

1. Bid Advertisement. The Village will provide the MWRDGC with 30 days notice prior to Bid Advertisement for the Project.
2. Construction. The Village shall provide the MWRDGC with a construction schedule and provide the MWRDGC a minimum of 72 hours notice before the following project milestones:
 - Start of work
 - Substantial completion
 - Completion of work

Article 7. Termination by the Village. Prior to commencement of Construction of the Project, the Village may, at its option, and upon giving notice to the MWRDGC in the manner provided in Article 25 below, terminate this Agreement as it pertains to the entire Project. The Village shall return all Project-related funds received from the MWRDGC no later than 14 days following its termination of the Agreement.

Article 8. Termination by the MWRDGC. Prior to Bid Advertisement of the Project, the MWRDGC may, at its option, and upon giving notice to the Village in the manner provided in Article 25 below, terminate this Agreement as it pertains to the entire Project.

Article 9. Effective Date. This Agreement becomes effective on the date that the last signature is affixed hereto.

Article 10. Duration. Subject to the terms and conditions of Articles 7 and 8 above, this Agreement shall remain in full force and effect for perpetuity.

Article 11. Non-Assignment. Neither party may assign its rights or obligations hereunder without the written consent of the other party.

Article 12. Waiver of Personal Liability. No official, employee, or agent of either party to this Agreement shall be charged personally by the other party with any liability or expenses of defense incurred as a result of the exercise of any rights, privileges, or authority granted herein, nor shall he or she be held personally liable under any term or provision of this Agreement, or because of a party's execution or attempted execution of this Agreement, or because of any breach of this Agreement.

Article 13. Indemnification. The Village shall defend, indemnify, and hold harmless the MWRDGC, its Commissioners, officers, employees, and other agents (“MWRDGC Party”) from liabilities of every kind, including losses, damages and reasonable costs, payments and expenses (such as, but not limited to, court costs and reasonable attorneys’ fees and disbursements), claims, demands, actions, suits, proceedings, judgments or settlements, any or all of which are asserted by any individual, private entity, or public entity against the MWRDGC Party and arise out of or are in any way related to: (1) the design, construction, or maintenance of the Project that is the subject of this Agreement; or (2) the negligent exercise of any right, privilege, or authority granted to the Village under this Agreement. The obligation of the Village under this Article 13 shall not include indemnification for the negligent acts, errors, or omissions committed by any MWRDGC Party.

Article 14. Representations of the Village. The Village covenants, represents, and warrants as follows:

1. The Village has full authority to execute, deliver, and perform or cause to be performed this Agreement;
2. The individuals signing this Agreement and all other documents executed on behalf of the Village are duly authorized to sign same on behalf of and to bind the Village;
3. The execution and delivery of this Agreement, consummation of the transactions provided for herein, and the fulfillment of the terms hereof will not result in any breach of any of the terms or provisions of or constitute a default under any agreement of the Village or any instrument to which the Village is bound or any judgment, decree, or order of any court or governmental body or any applicable law, rule, or regulation; and
4. The Village has allocated \$3,000,000.00 of funds for this project in addition to funds to be provided by the MWRDGC under this Agreement.

Article 15. Representations of the MWRDGC. The MWRDGC covenants, represents, and warrants as follows:

1. The MWRDGC has full authority to execute, deliver, and perform or cause to be performed this Agreement;
2. The individuals signing this Agreement and all other documents executed on behalf of the MWRDGC are duly authorized to sign same on behalf of and to bind the MWRDGC; and

3. The execution and delivery of this Agreement, consummation of the transactions provided for herein, and the fulfillment of the terms hereof will not result in any breach of any of the terms or provisions of or constitute a default under any agreement of the MWRDGC or any instrument to which the MWRDGC is bound or any judgment, decree, or order of any court or governmental body or any applicable law, rule, or regulation.

Article 16. Disclaimers. This Agreement is not intended, nor shall it be construed, to confer any rights, privileges, or authority not permitted by Illinois law. Nothing in this Agreement shall be construed to establish a contractual relationship between the MWRDGC and any party other than the Village.

Article 17. Waivers. Whenever a party to this Agreement by proper authority waives the other party's performance in any respect or waives a requirement or condition to performance, the waiver so granted, whether express or implied, shall only apply to the particular instance and shall not be deemed a waiver for subsequent instances of the performance, requirement, or condition. No such waiver shall be construed as a modification of this Agreement regardless of the number of times the performance, requirement, or condition may have been waived.

Article 18. Severability. If any provision of this Agreement is held to be invalid, illegal, or unenforceable, such invalidity, illegality, or unenforceability will not affect any other provisions of this Agreement, and this Agreement will be construed as if such invalid, illegal, or unenforceable provision has never been contained herein. The remaining provisions will remain in full force and will not be affected by the invalid, illegal, or unenforceable provision or by its severance. In lieu of such illegal, invalid, or unenforceable provision, there will be added automatically as part of this Agreement a provision as similar in its terms to such illegal, invalid, or unenforceable provision as may be possible and be legal, valid, and enforceable.

Article 19. Necessary Documents. Each party agrees to execute and deliver all further documents, and take all further action reasonably necessary to effectuate the purpose of this Agreement. Upon the completion of the Project, the Village shall provide the MWRDGC with a full sized copy of "As-Built" drawings for the Project. The drawings shall be affixed with the "As-Built" printed mark and must be signed by both the Village's resident engineer and the contractor.

Article 20. Deemed Inclusion. Provisions required (as of the effective date) by law, ordinances, rules, regulations, or executive orders to be inserted in this Agreement are deemed inserted in this Agreement whether or not they appear in this Agreement or, upon application by either party, this Agreement will be amended to make the insertions. However, in no event will the failure to insert such provisions before or after this Agreement is signed prevent its enforcement.

Article 21. Entire Agreement. This Agreement, and any exhibits or riders attached hereto, shall constitute the entire agreement between the parties. No other warranties, inducements, considerations, promises, or interpretations shall be implied or impressed upon this Agreement that are not expressly set forth herein.

Article 22. Amendments. This Agreement shall not be amended unless it is done so in writing and signed by the authorized representatives of both parties.

Article 23. References to Documents. All references in this Agreement to any exhibit or document shall be deemed to include all supplements and/or authorized amendments to any such exhibits or documents to which both parties hereto are privy.

Article 24. Judicial and Administrative Remedies. The parties agree that this Agreement and any subsequent Amendment shall be governed by, and construed and enforced in accordance with, the laws of the State of Illinois in all respects, including matters of construction, validity, and performance. The parties further agree that the proper venue to resolve any dispute which may arise out of this Agreement is the appropriate Court of competent jurisdiction located in Cook County, Illinois.

This Agreement shall not be construed against a party by reason of who prepared it. Each party agrees to provide a certified copy of the ordinance, bylaw, or other authority to evidence the reasonable satisfaction of the other party that the person signing this Agreement for such party is authorized to do so and that this Agreement is a valid and binding obligation of such party. The parties agree that this Agreement must be executed in quadruplicate.

The rights and remedies of the MWRDGC or the Village shall be cumulative, and election by the MWRDGC or the Village of any single remedy shall not constitute a waiver of any other remedy that such party may pursue under this Agreement.

Article 25. Notices. Unless otherwise stated in this Agreement, any and all notices given in connection with this Agreement shall be deemed adequately given only if in writing and addressed to the party for whom such notices are intended at the address set forth below. All notices shall be sent by personal delivery, UPS, Fed Ex or other overnight messenger service, first class registered or certified mail, postage prepaid, return receipt requested, or by facsimile. A written notice shall be deemed to have been given to the recipient party on the earlier of (a) the date it is hand-delivered to the address required by this Agreement; (b) with respect to notices sent by mail, two days (excluding Sundays and federal holidays) following the date it is properly addressed and placed in the U.S. Mail, with proper postage prepaid; or (c) with respect to notices sent by facsimile, on the date sent, if sent to the facsimile number(s) set forth below and upon proof of delivery as evidenced by the sending fax machine. The name of this Agreement i.e., “INTERGOVERNMENTAL AGREEMENT BY AND BETWEEN THE VILLAGE OF WINNETKA AND THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO FOR DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE OF NEW STORM SEWERS AND BERMS IN NORTHWEST WINNETKA” must be prominently featured in the heading of all notices sent hereunder.

Any and all notices referred to in this Agreement, or that either party desires to give to the other, shall be addressed as set forth in Article 26, unless otherwise specified and agreed to by the parties.

Article 26. Representatives. Immediately upon execution of this Agreement, the following individuals will represent the parties as a primary contact and receipt of notice in all matters under this Agreement.

For the MWRDGC:
Director of Engineering
Metropolitan Water Reclamation District
of Greater Chicago
100 East Erie Street
Chicago, Illinois 60611
Phone: (312) 751-7905
FAX: (312) 751-5681

For the Village:
Village President
510 Green Bay Road
Winnetka, Illinois 60093
Phone: (847) 501-6000
FAX: (847) 501-3180

Each party agrees to promptly notify the other party of any change in its designated representative, which notice shall include the name, address, telephone number and fax number of the representative for such party for the purpose hereof.

IN WITNESS WHEREOF, the Metropolitan Water Reclamation District of Greater Chicago and the Village of Winnetka, the parties hereto, have each caused this Agreement to be executed by their duly authorized officers, duly attested and their seals hereunto affixed.

VILLAGE OF WINNETKA

BY: _____
E. Gene Greable, Village President

Date: _____

ATTEST:

Robert Bahan, Village Manager/Village Clerk

Date: _____

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

Chairman of the Committee on Finance

Date

Executive Director

Date

ATTEST:

Clerk

Date

APPROVED AS TO ENGINEERING, OPERATIONS, AND TECHNICAL MATTERS:

Engineer of Stormwater Management

Date

Assistant Director of Engineering

Date

Director of Engineering

Date

APPROVED AS TO FORM AND LEGALITY:

Head Assistant Attorney

Date

General Counsel

Date



Agenda Item Executive Summary

Title: Comprehensive Annual Financial Report (CAFR)

Presenter: Ed McKee, Finance Director

Agenda Date: 08/19/2014

Consent: YES NO

- | | |
|-------------------------------------|-------------------------|
| <input type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | Resolution |
| <input type="checkbox"/> | Bid Authorization/Award |
| <input type="checkbox"/> | Policy Direction |
| <input checked="" type="checkbox"/> | Informational Only |

Item History:

The Village prepares a Comprehensive Annual Financial Report (CAFR) which is commonly referred to as an audit, as required by State Law. Because the Village moved to a calendar fiscal year effective 1/1/2014, this audit report covers only 9 months of activity (from 4/1/2013 to 12/31/2013). Ron Amen, Partner of the Village's accounting firm of Lauterbach and Amen, will be present at the meeting to provide a summary of the report and answer any questions.

Executive Summary:

The CAFR is the Village's final accounting of the fiscal year. The overall financial position of the Village remains strong and financial results were in line with expectations. Because of the short fiscal year, the overall expenses in many areas were about 75% of the annual budget. This is to be expected because 9/12th of the fiscal year took place, which is 75% of the annual amount (assuming expenses were incurred evenly throughout the year).

Some of the Village's largest revenues are not received evenly every month. For example, property taxes are received mainly in February / March and then again in August / September. Since the 9 month fiscal year included only one property tax collection time period, property tax revenue was close to 50% the annual budget amount.

The CAFR is available at the Winnetka Library and on line at:

<http://www.villageofwinnetka.org/government/council-members/fiscal-transparency/>

The Staff and Village Auditor will make a brief presentation at the August 19, 2014 Council Meeting and answer any questions or concerns.

Recommendation:

Review CAFR results with the Village Auditor and Staff.

Attachments:

None - CAFR distributed previously.



Agenda Item Executive Summary

Title: New Trier High School: Preliminary Design Progress

Presenter: Dr. Linda Yonke, Superintendent

Agenda Date: 08/19/2014

Consent: YES NO

- | | |
|-------------------------------------|-------------------------|
| <input type="checkbox"/> | Ordinance |
| <input type="checkbox"/> | Resolution |
| <input type="checkbox"/> | Bid Authorization/Award |
| <input type="checkbox"/> | Policy Direction |
| <input checked="" type="checkbox"/> | Informational Only |

Item History:

None.

Executive Summary:

New Trier High School has proposed a facilities project that would replace three of the oldest and most inaccessible buildings on the Winnetka Campus. The renovation proposal calls for demolition of the 1912 cafeteria, the 1931 tech arts building and 1950 music building, with one new building replacing the three existing. The School Board will be making a decision about whether to place a referendum question on the November ballot related to project funding.

School officials requested an opportunity to present the project to the Village Council. After the presentation, they will be available to answer Council's questions.

Recommendation:

Informational presentation from Superintendent Dr. Linda Yonke and New Trier Township High School staff.

Attachments:

None.