

Glenn C. Reynolds  
1261 County Road U  
Verona, WI 53593

October 18, 2023

Dalne County Zoning Committee  
210 Martin Luther King Blvd  
Madison, Wisconsin 53593

Re: Deer Creek Rezoning (Petition 11981 and  
Conditional Use Proposal (Petition CUP 02607)

Dear Zoning Committee Members,

My name is Glenn Reynolds and I live at 1261 County Rd. U in the Town of Primrose. I have lived here since 1982 when my wife and I moved into and rehabilitated an abandoned farmhouse and raised our family. I was fully supportive of my neighbor Shirley Sonstebly selling a five acre wood lot and rezoning the land for the benefit of the Deer Creek Conservation Club in 1988. Back then Deer Creek was founded and run by local citizens such as Pete Way and Leroy Haag. These were friends and neighbors who cared deeply about the land and the water in Primrose and their community. Their conservation efforts resulted in the complete restoration of the West Branch of the Sugar River just south of the Club property. Since the West Branch runs through our farm I watched firsthand as Leroy Haag and others from the Club worked with Dane County and Trout Unlimited to restore a once dead, muddy waterway to a class 2 trout stream. But that was over 30 years ago.

The Club's priorities have changed. Now after three decades of shooting lead and clay pigeons into a productive farm field, the Club proposes to expand shooting and further contaminate to the same Ag land. The Club has refused to produce a plan to clean up the toxic levels of benzo (a) pyrene (from the coal tar infused clay pigeons) or the lead (from the shot) that has been found in recent soil sampling of the shot fall area by UW Extension. (See December 2022 Soils Report from Geoffrey Siemering).

The shot fall site is connected to an intermittent waterway that leads directly to the West Branch of the Sugar River.

The Club proposes to remove the lead when it is "economically feasible". But that ship has sailed. Lead recycling may never happen because the Club waited too long to retrieve the lead which has now oxidized and become one with the soil. (See Soils Report). The Club has no

plan to remove the toxic chemicals from the 10's of thousands of coal tar laden clay pigeons that now lay on the same contaminated land

## **REZONING FROM FARMLAND TO RECREATIONAL IS WRONG**

The Club has transformed from a local conservation organization to a shooting club that seeks to expand its shooting on an additional 20 acres of farmland that supported three generations of farm families. The Club has failed to demonstrate that rezoning this 20-acre parcel out of farmland preservation meets the test of Section 91.48 Wis. Stats. The Ag land is not better suited to be a shot fall area and this proposal violates the heart and spirit of both the Town of Primrose Land Use Plan and the Dane County Farmland Preservation Plan.

## **THE CLUB HAS NOT SHOWN COMPLIANCE WITH THE CUP STANDARDS.**

The neighbors and I oppose the Deer Creek CUP because it fails to establish by substantial evidence that it meets at least four of the criteria necessary to grant a CUP. On October 16, 2023 the Town Board found that several of the 8 criteria were not met with "substantial evidence".

The Public Hearing held on September 18, 2023 allowed the neighbors to establish why the Deer Creek' Conditional Use Permit should be denied. What follows are the most relevant criteria for a CUP and how Deer Creek's proposal does not measure up.

- 1. The establishment maintenance or operation of the conditional use will not be detrimental to or endanger the public health, safety, comfort or general welfare.*

Deer Creek's proposal, if granted would clearly be detrimental and endanger the public health, safety comfort and general welfare. The soil test has established that 30 years of shooting lead and clay pigeons has contaminated a once productive farm field with high levels of lead and coal tar which are toxic to both human beings and wildlife. This poses a risk not only to Town residents and neighbors but to any one who comes in contact with the shot fall soil – especially children.

The Club now proposes to pour even more lead and coal tar into a once productive agricultural field with no plan to clean it up. The Club has not followed Best Management Practices such as the regular collection of lead in the shot fall area. The soil test confirms that the long delay in retrieving the lead has allowed the lead pellets to oxidize. The lead has now become a part of the soil but is no less toxic. The risk to human health is highest for children for whom there are no safe lead levels. The Club does not even mention the benzo (a) pyrene contamination in the shot fall area that are 24 times above state mandated levels. The neighbors produced ample literature to demonstrate that lead toxicity in the soil can adversely affect birds

and wildlife which either consume the pellets or the creatures such as earth worms that have contact with the soil.

The Club imposes no limits on the number of shots they can take place on an all day shoot. Using simple math calculations from the Club's proposal for an 8 hour all day shoot would permit up to 7500 shots in a single day and the deposition of an additional 500 pounds of lead to the contaminated farm field. Yearly deposition of lead would be measured in tons.

The health safety and welfare of Town citizens are not protected by the Club's proposal.

2. *The uses, values, and enjoyment of other property in the neighborhood for purposes already permitted shall be in no foreseeable manner substantially impaired or diminished by establishment, maintenance or operation of the conditional use.*

The Club's proposal under the CUP and rezoning would clearly diminish and substantially harm the uses, values and enjoyment of adjacent properties. Miller Road has already lost two neighbors as a result of the Club's actions over the last few years.

Property values are obviously diminished when there is a large potentially chaotic clubhouse next door along with contaminated land. Imagine one weekend with an all day shoot on Saturday and then an extended hour party with 300 hundred people the next day. Who would buy a house next to a gun range that wants to shoot up to 7500 rounds in single day?

The impact on property values is obvious. With a constant and sporadic movement of trucks and vehicles and up to 300 people the chaos on Miller Road is a given. If the CUP is granted for all day shoots more people would come from miles around to shoot in the morning, grab lunch and then shoot in the afternoon.

The neighbor's interests are not being protected by the Club's proposed CUP.

3. *The establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.*

The proposed CUP will also impede the normal orderly development and improvement of the surrounding property for use as permitted in the Town. For instance when the Club closes its doors, the shot fall area could not be farmed as it was for the fast past century without cleaning up the lead and coal tar pollution. Farmers cannot work in the fields without having contact with the soil. Extra care would be needed to blow dust off the clothes on the tractors so that it wouldn't be brought home. What farmer would want to take the chance of bringing home lead dust to poison his children?

It is certainly foreseeable that Miller Road could be extended and shot fall area could be a potential building site. But the current soil contamination would prevent any person from living there safely for fear of lead and coal tar contamination. No child could play in the front yard and no home gardens could grow fresh vegetables.

This is the first toxic waste site in the Town of Primrose.

*4. The conditional use is consistent with the adopted town and county comprehensive plans and Farmland Preservation Standards*

The Club's CUP and rezone requests are also NOT consistent with the Town of Primrose Land Use Plan which promotes the preservation of agricultural land and prioritizes agriculture as the main economic activity in Primrose. It is hard to imagine justification for continuing to pollute a fertile farm field with toxic coal tar and lead. The rationale to change the zoning from agriculture to recreational appears to be to remove the Town Land Use Plan protections for the land so that contamination can continue with impunity. It is incomprehensible that a conservation club would support such a reckless land use.

The Club's CUP and Rezone proposal violates central goals and policies of the Primrose Land Use Plan to preserve farmland for future generations. Both these Petitions were turned down by the Town of Primrose for sound reasons. They should also be denied by the Dane County Board.

Deer Creek's adjacent neighbors continue to support the Club's continued operation but on conditions that do not threaten the health safety and welfare of town citizens, threaten land, water, wildlife and agricultural land productivity.

Thank you for consideration of these perspectives. I have attached a copy of the soils report which I have referred to in this letter.

Sincerely

Glenn C. Reynolds



DEPARTMENT OF  
**Soil Science**

UNIVERSITY OF WISCONSIN-MADISON

December 5, 2022

Report to Town of Primrose and Primrose Gun and Conservation Club

Topic: Lead levels in soil within club sporting clay area

On September 19 Geoff Siemering, UW Madison Extension, met with representatives of the Primrose Gun and Conservation Club, town council and club neighbors at the club sporting clay shooting area. After a discussion of lead (Pb) and polycyclic aromatic hydrocarbon (PAH) soil contamination, the group moved to sample the area in question.

Surface samples were analyzed for a range of elements using a portable x-ray fluorescence (XRF) spectrometer by Mr. Siemering. Composite samples of 30 increments each were collected by group members using stainless steel soil probes provided by Mr. Siemering. Each increment was a 1" diameter 4" deep soil plug collected by pushing the steel probe into the ground, twisting and pulling the probe up. The plugs were then deposited into a plastic bucket for further processing.

The composite samples were collected from three regions within the shooting area. Region 1 is beyond the further range that shot is expected to fall and can be considered to give background soil elemental values. Region 2 is from the furthest range that shot can be expected to fall to where shot is estimated to likely fall (per club member estimates). Region 3 is the area where shot is expected to fall most heavily. Surface XRF Pb sample analysis confirmed estimates of shot fall density. One additional composite sample was collected within the area closest to the gun stands for analysis for PAH compounds. A map of the sample locations is attached.

Mr. Siemering brought the four composite sample containers back to the UW Madison campus for further processing and analysis. The samples for lead analysis were air dried, deaggregated with a mortar and pestle, and sieved through a 2mm sieve to isolate the soil fraction of the sample collected. Material smaller than 2mm is considered the soil fraction and this removes all larger rock fragments and plant material. After sieving the composite samples were mixed thoroughly and three subsamples were analyzed using the XRF. The sample for PAH analysis was dried, aggregates broken apart by hand and obvious sporting clay fragments removed. This sample analyzed by CT Laboratories (Baraboo, WI). The data for this analysis appended to the end of this report.

Sample analysis showed that the soil lead background values for the area are approximately 12ppm (mg/kg) (Region 1). Region 2 showed a slight increase to 24ppm. Region 3 soil averaged 198ppm. The region 3 surface sample were generally higher than the composite. This is likely due to dilution from soil with lower lead concentrations from below the surface being mixed with higher Pb surface soil. The variation (79-307ppm) seen in the samples analyzed from Region 3 are typical of that expected with discrete sample analysis as soil is a highly heterogeneous matrix. Composite sampling helps to smooth out the variation and give more

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useful scientific data. The data from the discrete and composite samples are provided as a PDF file. No other elemental enrichment was noted beyond that for Pb.

As expected, the area of highest shot fall showed the highest Pb concentration. At approximately 200ppm, per WDNR guidelines, a “spill” would be considered to have occurred (and hence need to be reported), but a cleanup not mandated as would be the case above 400ppm. One item to note is that no visible shot fragments were observed in the sieved soil. As most shot used at the club is larger than 2mm, it is likely that future “shot harvesting” will not reduce this Pb concentration. The elevated soil Pb levels are likely due to oxidation of the Pb materials and dissolution of the shot into the soil. As use continues, it can be expected that the surface Pb concentrations will continue to increase.

As noted during the discussion at the club, Pb tends to remain in the soil where it is deposited with minimal downward movement in the soil column. It is unlikely that lead contamination at the club will impact local well water supplies. Large rain events can move the contaminated soil downslope and off site. Current site management with the area tilled and planted will reduce the potential for soil runoff. Continued vegetative cover is recommended.

If the club ceases operation and the land is sold, potential buyers should be notified of the Pb soil contamination. An environmental restoration of the area would likely involve the removal and off-site disposal of the top several inches of soil from the most impacted areas. Reuse on site is possible if human contact is prevented and work done in accordance with WDNR guidelines and approvals.

The lead present does not constitute a hazard to the plants growing in the field nor the shooters at the end of the field. There is the potential for elevated Pb levels in the soybeans, but confirmation of this would take further study. If only used as a forage area for wild deer there would be no hazard from deer harvested from the area. In management of the contaminated soil, it is most important to limit contact with the soil. This includes field preparation for planting. The field preparation can result in lead contaminated soil being stuck to boots and tractor tires and implements. This can then cause the lead contaminated material to be transported to areas where it is not expected. Working the area when it is sufficiently dry will prevent most of this soil transport.



Geoffrey Siemering, MS



Sporting clay fall area  
Testing for PAHs to be conducted  
by WI State Lab of Hygiene

Region 3: Primary shot fall area  
Lead at surface ~ 300ppm  
Composite 4' core sample ~200ppm

Region2: Furthest shot fall area  
Lead at surface ~15ppm  
Composite 4' core sample ~24ppm

Region1: Background area, no shot  
Lead at surface ~9ppm  
Composite 4' core sample ~12ppm

## **Primrose Gun Club sporting clay fall area soil PAH values.**

The polycyclic aromatic hydrocarbon (PAH) soil test results from a single composite soil sample collected from the sporting clay fall area are shown in Table 1. Sporting clays are almost exclusively made from clay, colorant, and coal tar. The coal tar is the source of the PAH compounds.

Five of the tested compounds (Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Dibenz[a,h]anthracene, Indeno[1,2,3-c,d]pyrene) exceed the WDNR direct contact residual contaminant limits (RCL) for soil. For comparison purposes the PAH soil background values determined for the urban core of Milwaukee are also shown.

Based on the Milwaukee study DNR proposed to increase the RCLs by 10x but this change did not make it through the complete rule making process. With the RCLs increased 10X benzo(a)pyrene would still exceed by 2X the allowable limit.

The level of soil contamination is not surprising based on similar investigations by the U.S. Department of Defense. As more sporting clays are dispersed on the ground in this area the contaminant concentration levels will continue to increase. The compounds listed above are generally immobile in the soil and do not pose a threat to groundwater supplies. Surface water supplies may be impacted if soil is washed from the field directly into the nearby stream in a large rain event.

While organic compounds do decompose in soil, the compounds listed above are known to be particularly persistent in soil with residence times of multiple decades.

As with the soil lead found at the club, the primary health risk to human from these PAHs would be if the land use changes and the area is converted to playgrounds, gardens or another activity where high human-soil contact takes place.

Table 1. Soil PAH values.

PAH Compound (carcinogen in <b>bold</b> )	Primrose Gun Club, sporting clay fall area (mg/kg)	WNDR direct contact RCL (mg/kg)	Milwaukee Background PAH values (mg/kg)
Acenaphthene	0.076	3590	0.05
Acenaphthylene	0.00397	NA	0.0352
Anthracene	0.159	17900	0.118
<b>Benz[a]anthracene</b>	<u>1.91</u>	1.14	0.599
<b>Benzo[a]pyrene</b>	<u>2.81</u>	0.115	0.68
<b>Benzo[b]fluoranthene</b>	<u>3.4</u>	1.15	0.878
<b>Benzo[e]pyrene</b>	2.00	NA	NA
Benzo[g,h,i]perylene	2.34	NA	0.465
<b>Benzo[k]fluoranthene</b>	1.16	11.5	0.514
<b>Chrysene</b>	1.84	115	0.764
<b>Dibenz[a,h]anthracene</b>	<u>0.388</u>	0.115	0.144
Fluoranthene	1.59	2390	1.358
Fluorene	0.0302	2390	0.0521
<b>Indeno[1,2,3- c,d]pyrene</b>	<u>2.36</u>	1.15	0.422
1-Methylnaphthalene	0.00484	17.6	0.0373
2-Methylnaphthalene	0.00784	239	0.03965
Naphthalene	0.00865	5.52	0.06894
Phenanthrene	0.45	NA	0.558

**ANALYTICAL REPORT**

UW MADISON SOIL SCIENCE  
 GEOFF SIEMERING  
 1525 OBSERVATORY DRIVE  
 MADISON, WI 53706

Project Name: PRIMROSE GUN CLUB  
 Project Phase: PRIMROSE, WI  
 Contract #: 3089  
 Project #:  
 Folder #: 173533  
 Purchase Order #:

Page 1 of 3  
 Arrival Temperature: See COC  
 Report Date: 12/5/2022  
 Date Received: 11/8/2022  
 Reprint Date: 12/5/2022

CT LAB Sample#: 1260865	Sample Description: SPORTING CLAY SOIL	Sampled: 9/25/2022 11:00
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Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>										
Solids, Percent	98.8	%			1			11/9/2022 14:35	BMM	EPA 8000C
<b>Organic Results</b>										
1-Methylnaphthalene	4.84	ug/kg	1.2 *	5.1	1		11/21/2022 09:00	11/30/2022 14:39	JJY	EPA 8270D-SIM
2-Methylnaphthalene	7.84	ug/kg	1.0	5.1	1		11/21/2022 09:00	11/30/2022 14:39	JJY	EPA 8270D-SIM
Acenaphthene	76.0	ug/kg	1.0	5.1	1		11/21/2022 09:00	11/30/2022 14:39	JJY	EPA 8270D-SIM
Acenaphthylene	3.97	ug/kg	1.0 *	5.1	1		11/21/2022 09:00	11/30/2022 14:39	JJY	EPA 8270D-SIM
Anthracene	159	ug/kg	1.1	5.1	1		11/21/2022 09:00	11/30/2022 14:39	JJY	EPA 8270D-SIM
Benzo(a)anthracene	1910	ug/kg	100	510	100	Y	11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM
Benzo(a)pyrene	2810	ug/kg	91	510	100	Y	11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM
Benzo(b)fluoranthene	3400	ug/kg	100	510	100	Y	11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM
Benzo(e)pyrene	2000	ug/kg	91	510	100	Y	11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM
Benzo(g,h,i)perylene	2340	ug/kg	120	510	100	Y	11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM
Benzo(k)fluoranthene	1160	ug/kg	100	510	100	Y	11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM
Chrysene	1840	ug/kg	100	510	100	Y	11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM
Dibenzo(a,h)anthracene	388	ug/kg	120 *	510	100	Y	11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB Sample#: 1260865

Sample Description: SPORTING CLAY SOIL

Sampled: 9/25/2022 11:00

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Fluoranthene	1590	ug/kg	120	510	100		11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM
Fluorene	30.2	ug/kg	0.91	5.1	1		11/21/2022 09:00	11/30/2022 14:39	JJY	EPA 8270D-SIM
Indeno(1,2,3-cd)pyrene	2360	ug/kg	120	510	100	Y	11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM
Naphthalene	8.65	ug/kg	1.0	5.1	1		11/21/2022 09:00	11/30/2022 14:39	JJY	EPA 8270D-SIM
Phenanthrene	450	ug/kg	120 *	510	100		11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM
Pyrene	2050	ug/kg	91	510	100	Y	11/21/2022 09:00	12/2/2022 15:09	JJY	EPA 8270D-SIM

**Notes regarding entire Chain of Custody:**

Notes: \* Indicates a value in between the LOD (limit of detection) and the LOQ (limit of quantitation). All LOD/LOQs are adjusted to reflect dilution and also any differences in the sample weight / volume as compared to standard amounts.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Brett M. Szymanski  
 Project Manager  
 608-356-2760

**QC Qualifiers**

<u>Code</u>	<u>Description</u>
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

**Current CT Laboratories Certifications**

Wisconsin (WDNR) Chemistry ID# 157066030  
 Wisconsin (DATCP) Bacteriology ID# 289  
 Louisiana NELAP (primary) ID# 115843  
 Illinois NELAP Lab ID# 200073  
 Kansas NELAP Lab ID# E-10368  
 Virginia NELAP Lab ID# 460203  
 ISO/IEC 17025-2005 A2LA Cert # 3806.01  
 DoD-ELAP A2LA 3806.01

