DRAFT

VILLAGE OF HINSDALE

ENVIRONMENT AND PUBLIC SERVICES COMMITTEE MINUTES

TUESDAY, DECEMBER 14, 2009

MEMORIAL HALL

Chairman Laura LaPlaca called the meeting of the Environment and Public Services Committee to order at 4:00 P.M., Tuesday December 14, 2009, in Memorial Hall of the Memorial Building, 19 East Chicago Avenue, Hinsdale, IL.

PRESENT: Chairman Laura LaPlaca, Trustee Doug Geoga, Trustee Kim Angelo, Trustee Bob Saigh

ABSENT: None

ALSO PRESENT: Dan Deeter, George Franco, John Finnell, Dan Hopkins, Rob McGinnis, David Cook

Approval of Minutes – November 9th, 2009

The EPS Committee reviewed the minutes from the November 9th, 2009 meeting. Minor changes were addressed and changed. Trustee Angelo motioned for approval of the November 9th, 2009 minutes as corrected. Trustee Saigh seconded. The motion passed unanimously.

Public Services Monthly Report

Mr. Franco stated Public Works has sent crews out 5 times for snow removal. The Village has used 156 tons of salt and 112 tons of sand at a cost of $11,700 and $6,700, respectively. 267 hours of regular time and 164 hours of overtime were used to combat the snowstorms.

Seasonal Snow Plow Drivers

Mr. Franco stated that the Village is looking to hire part-time drivers to save money on overtime costs. This would help the most during back-to-back snowfalls. He noted that Woodridge has been hiring part-time employees for 15 years. There would be some up-front costs for training the part-time drivers. Mr. Franco estimated that the Village would start with three part-time snow plow drivers. During a snow event, the part-time drivers would be used based in on the volume of snow and the anticipated reduction in overtime hours. Chairman LaPlaca felt this was a good idea. The committee authorized Mr. Franco to start actively pursuing part-time drivers.

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Engineering Monthly Report

Veeck Park Wet Weather Facility Update

Mr. Chester Kochan from Clark Dietz provided the Committee with an update on the construction of the Veeck Park Wet Weather Facility. He stated the backfilling has begun and the dirt piles are beginning to come down. When suitable weather occurs, more backfilling and landscaping will be worked on. The SCADA system has been ordered. Chairman LaPlaca questioned if the SCADA system installation will move up the completion date for the tank to be operational. She also questioned when the training of Village staff would take place. Mr. Deeter stated training would begin in January.

Mr. Deeter discussed comments the Village has received from Western Springs residents about the Veeck Park Wet Weather Facility. He stated most of the issues brought up in this letter have been previously addressed. Mr. Chuck Johnson of Clark Dietz indicated this project has been reviewed by all state and federal entities. He does not anticipate any issues surfacing in the future. General discussion continued over the letter received from a Western Springs resident. A response has been sent by Huff & Huff addressing his concerns.

Trustee Saigh questioned why certain funds were withheld from contractors on certain projects. Mr. Deeter stated a percentage of the contract amount is held for one year. During this time the Village can observe whether the completed work will survive use through all four seasons. Once the year is successfully completed, the withheld funds are paid to the contractor. Mr. Deeter also reported on plans for a new four-gate railroad crossing at Monroe St that the Village is planning with the Illinois Commerce Commission.

Status update on the Woodlands Green Initiative and consideration of an amendment to the Clark Dietz, Inc. contract

Chairman LaPlaca provided background information to the Committee members regarding this agenda item. Clark Dietz has conducted a preliminary study of the Woodlands to determine if using green technologies would address the stormwater management issues in a cost-effective manner. Dave Talbot of Clark Dietz reviewed the methodologies used in the study, goals of the improvements, and green strategies that were used. This study focused on one drainage area within the Woodlands and extrapolated the findings throughout the Woodlands. He provided a preliminary cost estimate for Woodlands Green Initiative. In order to address residents' specific questions throughout the Woodlands, Mr. Talbot recommended that the study should be expanded to provide preliminary drainage solutions for the other drainage areas within the

Woodlands. He provided the committee with an estimate of the cost for the additional study. Discussion ensued between the Committee members over the details provided in the presentation by Clark Dietz representatives.

The committee discussed the issues involved with funding the program. Chairman LaPlaca stated that traditionally 40% of the cost for street repair will be provided by the residents and the rest of the cost will be paid by the Village. She discussed funding options the Village might use such as a sales tax increase. Mr. Cook reported on funding options the Village has available and the steps needed to move forward on them. Trustee Saigh questioned if a 25% contingency is enough for the Woodlands project. Mr. Talbot stated that although many of the project features are unique to Hinsdale, most are known and proven technologies that can be accomplished by landscaping companies. Other items, such as sewer, water, and paving work, are familiar infrastructure items. Thus, he was confident the contingency will be adequate.

Pat Bruder, a Hinsdale resident, asked if additional funding is received from the State government, how would that affect the 60/40 cost split? Chairman LaPlaca stated staff is still looking into that question and at this time she did not have an answer. Mr. Cook added that the State money would be for a specific portion of the Woodlands plan and would most likely be a Board policy issue. Ms. Bruder also questioned if the proposed sewers were separated in the plan and where they would be located in relation to the street. Chairman LaPlaca stated the plan calls for separate sanitary and storm sewers. Discussion continued over the use of permeable surfaces and if they were planned to be installed in certain areas for residential parking near the street. Ms. Bruder thanked the EPS Committee for all of their hard work and efforts on this issue.

Bill Seith, a Hinsdale resident, questioned why the estimated sewer costs were lower for the sewers needed in the Woodlands. Mr. Deeter stated the Village was considering lining sewers instead of replacing them to save funds and lower the total cost of the project. Chairman LaPlaca laid out a brief timeline and stated the next step will be finding the financing to move forward. She urged residents to look at the information regarding this item on the Village website.

Request for Board Action

Approve a Resolution for the Veeck Park Wet Weather Facility Contract Change Order Number 3 in the amount of $1,999.98 to John Burns Construction Company

Chairman LaPlaca provided background information to the EPS Committee members regarding this item and the need for the change order. Trustee Angelo motioned to approve a resolution for the Veeck Park Wet Weather Facility Contract change order number 3 in the amount of $1,999.98 to John Burns Construction Company. Trustee Saigh seconded. The motion passed unanimously.

Approve a Purchase Order to P.R. Streich & Sons, Inc. to supply and install a vehicle hoist in the Public Service Building in the amount of $11,167.00

Mr. Franco stated the Public Works department had planned to delay this expense until the next budget. But, due to safety concerns, the hoist should be replaced at this time. Trustee Angelo motioned to approve a purchase order to P.R. Streich & Sons, Inc. to supply and install a vehicle hoist in the Public Service Building in the amount of $11,167.00. Trustee Geoga seconded. The motion passed unanimously.

Approve a Pledge Supporting the Water Conservation and Protection Program Established by the DuPage Water Commission

Chairman LaPlaca stated this information would be distributed with the water bills to Village residents once this item was approved by the EPS Committee. Discussion took place over the water bill fee increase that will be taking place. Trustee Angelo motioned to approve a pledge supporting the water conservation and protection program established by the DuPage Water Commission. Trustee Angelo seconded. The motion passed unanimously.

Adjournment

With no further issues to be brought before the Committee, Trustee Saigh moved to adjourn. Trustee Angelo seconded. Motion carried and the meeting was adjourned at 5:56 P.M.

Respectfully submitted,

DRAFT

Dan Deeter
Village Engineer

MEMORANDUM

TO: CHAIRMAN LA PLACA AND THE EPS COMMITTEE

FROM: GEORGE FRANCO

SUBJECT: PUBLIC SERVICES MONTHLY REPORT-DEC. 2009

Date: 1/4/10

The Public Service Department has spent the month of December responding to an array of weather conditions, which brought about rain, sleet/ice, snow, and arctic temperatures. Snow and ice crews were dispatched 18 times during December, plowing snow/ice and spreading 472.5 tons of rock salt and 343.5 tons of sand on village roadways with another 3.9 tons of material used on village sidewalks, ramps, and stairs. The cost for chemicals used was $35,376.08 for rock salt, $1,512.65 for bagged material, $5,520.05 for sand, and $944.00 for liquid calcium chloride for a total cost of $43,352.78. These crews have logged approximately 691 overtime hours and 522 regular hours to combat the weather conditions. Sidewalks in the Business District have been shoveled two times during the month at a cost of $1,900.00.

All snow and ice removal equipment has been inspected and repaired as necessary, and is considered to be in good working order. Public Service crews also responded to and repaired 2 water main breaks during the month of December with crews logging 39 hours of overtime for the emergency repairs. These two breaks occurred on the same stretch of water main on 55th Street between Oak St. and Elm St., and were repaired on 12/16/09 and 12/24/09. The Public Services department prepared the Burns Field ice rink by placing timbers, the tarp, and filling the area with water. With the help of favorable weather conditions, the ice rink was opened on December 29th, with crews now performing daily maintenance on the rink as weather permits. The Public Service Department will be targeting the following tasks in January with cooperative weather conditions:

- The continuation of the small tree pruning program, with Village crews pruning trees with a diameter of 10 inches or less. During the month of December village crews pruned 657 trees.

- The continuation of the tree pruning contract with the Care of Trees. The contractor has pruned 369 parkway trees with a dbh over 10 inches to date.

- Removal and storage of Christmas decorations from the Business District and Burlington Park.

- Daily monitoring of sump pump discharge locations, which require maintenance to remove ice hazards from the roadways throughout the Village. During December, staff utilized 9 tons of salt and 30 man hours to maintain these locations.

- Public Services staff is awaiting approval of applications submitted for Tree City USA status, which would be the 18th consecutive year for the Village, as well as permit approval for prescribed prarie burns for Charleston Road and Jackson St. to be performed in the spring.

Cc: Dave Cook, President Cauley, and Board of Trustees

PUBLIC SERVICE MONTHLY REPORT FOR DEC. 2009.00

ROADWAY

19.00	SIGNS
9.00	POSTS
8.00	SIGNS REPAIRED
2.50	TONS OF COLD MIX USED FOR POTHOLES
0.00	TONS OF HOT MIX
18.00	TONS OF GRAVEL FOR ALLEYS ACT,
0.00	WHITE PAINT
0.00	YELLOW PAINT
0.00	MAN HOURS BASIN TOP CLEANING
36.00	MAN HOURS ALLEY GRADING
0.00	MAN HOURS ALLEY TRIMMING
0.00	YARD OF CONCRETE

SNOW / ICE

18.00	Times crews where called out for snow and ice.
472.50	Tons of road salt used
343.50	Tons of sand used
3.88	Tons of salt + calcium for walks, ramps, stairs and train platforms.

TREE MAINT

663.00	TREES TRIMMED BY VILLAGE STAFF
2.00	TREES REMOVED BY VILLAGE STAFF
0.00	ELM TREES DETECTED BY STAFF 56 Pub..66 Private
0.00	ELM TREES REMOVED BY STAFF
0.00	ELM TREES THAT HAVE HAD AMPUTATED LIMBS
0.00	TREE STUMPS REMOVED BY STAFF
0.00	TREES PLANTED BY STAFF
369.00	TREES TRIMMED BY CONTRACTOR(to date)
0.00	NON ELMS REMOVED BY CONTRACTOR
0.00	ELMS REMOVED BY CONTRACTOR

EQUIP MAINT

7.00	SCHEDULED MAINT
47.00	UNSCHEDULED REPAIRS

WATER OPERATIONS

60955.00	GALLON OF WATER PUMPED TO DISTRIBUTION SYSTEM
70571.00	PUMPED IN DECEMBER 2007
0.00	FEET OF SEWER LINES CLEANED
0.00	FEET OF SEWER LINE TELEVISED
2.00	SEWER BACKUP INVESTIGATIONS
1.00	BASINS REPAIRED
0.00	BASINS REBUILT
0.00	BASINS CLEAN FROM DEBRIS INSIDE
46.00	METER READINGS
2.00	WATER METERS REPAIRED
1.00	WATER METERS INSTALLED
1.00	HYDRANTS REPAIRED

5.00	HYDRANTS FLUSHED
2.00	WATER MAINS REPAIRED
0.00	SEWER SERVICE LOCATED
123.00	J U L I E LOCATE REQUEST
3.00	WATER CONNECT OR DISCONNECT INSPECTIONS
6.00	VALVES EXERCISED
1.00	VALVES REPAIRED
3.00	WATER METERS REMOVED
0.00	SEWER CONNECT INSPECTIONS
0.00	FOUNTAINS SERVICED

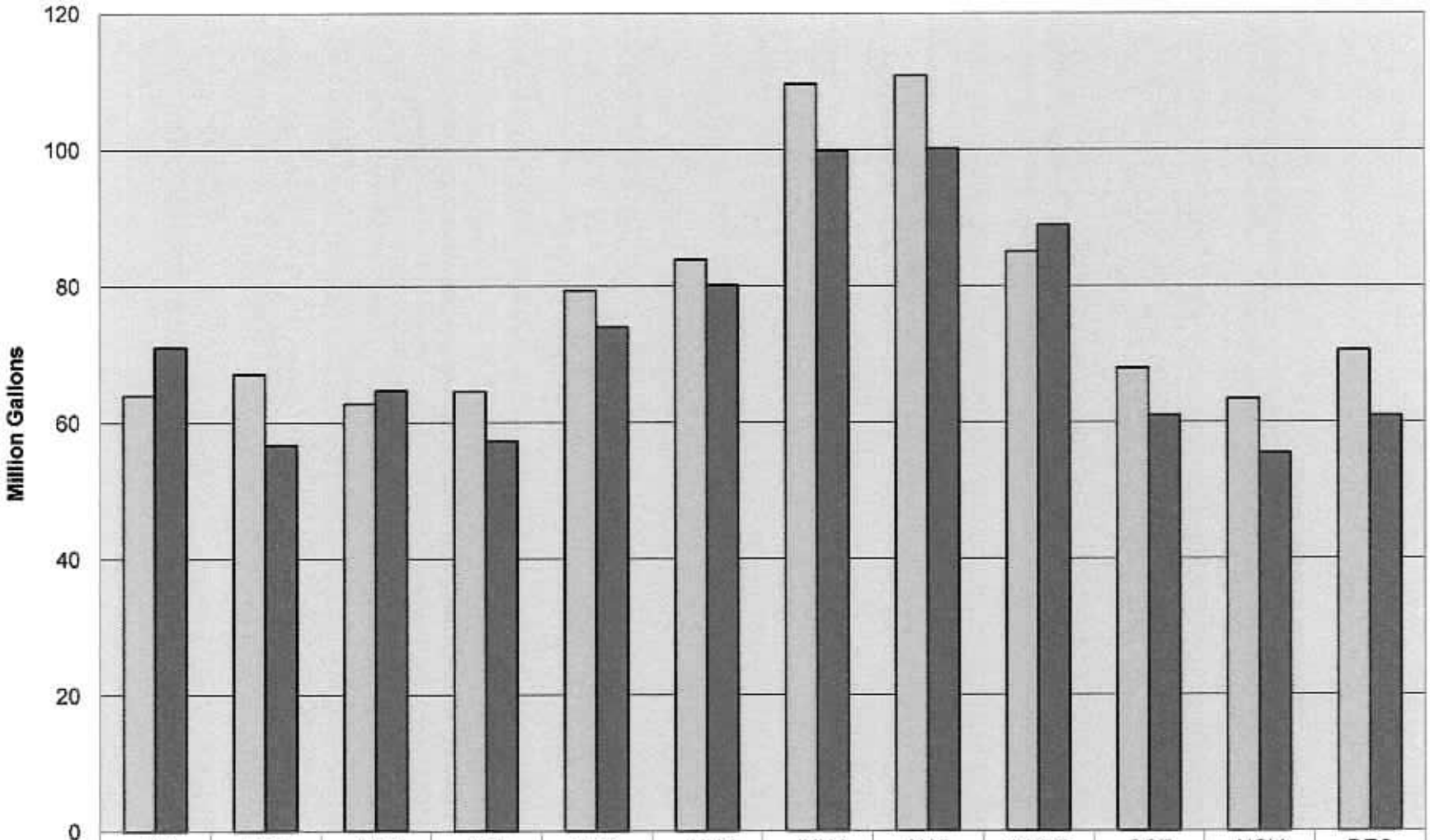
PARKS MAINTENANCE

Parks maintenance crews have been keeping up with general maintenance which includes garbage and litter pick and cleaning of the restrooms at Klm and a clean up of the Burns Field warming house before the of the formation of the ice rink. All athletic fields have been prepared for the winter season and equipment has been stored. Service crews installed straw bales around the trees in sledding areas for safety. Staff has applied for the prescribed prarie burn permits for the Jackson Street Prarie along Route 83 and Charleston Road.

BUILDING MANTENANCE

Building maintenance crews have been monitoring and servicing heating systems in Village owned buildings, making repairs as needed. Crews have continued with floor repairs at the Brush Hill ticket office, boiler repairs at the Memorial Building, and tuckpointing repairs at the Fire Department. Building maintenance crews assisted with the testing of all water fire systems in Village owned buildings. Village crews have inspected the emergency generators and platform tennis heaters to ensure proper operation.

MONTHLY PUMPAGE



	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
2008	64.001	67.106	62.785	64.606	79.337	83.882	109.602	110.839	85.013	67.941	63.413	70.571
2009	71.03	56.692	64.72	57.31	74.029	80.129	99.884	100.131	88.953	60.979	55.502	60.955

VILLAGE OF HINSDALE
MONTHLY REPORT

Month: December, 2009

Day	*Dist x1000*	*CL_2 Average*	*Turbidity Average*	*Fluoride Average*	*H_2O Temp Average*	*Air Temp Average*	*Total Precip*
1	1875	0.82	0.01	1.09	50	45	0.00
2	1882	0.81	0.01	1.08	50	49	0.00
3	1805	0.79	0.01	1.06	50	48	0.00
4	1804	0.80	0.01	1.04	48	37	0.00
5	1862	0.77	0.01	1.14	48	30	0.00
6	1826	0.74	0.01	1.12	48		0.00
7	1823	0.76	0.01	1.10	48	34	0.00
8	1888	0.78	0.01	1.08	48	34	0.00
9	2033	0.82	0.01	1.06	47	33	0.00
10	1910	0.81	0.01	1.06	47	5	0.00
11	2087	0.83	0.01	1.04	47	25	0.00
12	2119	0.81	0.01	1.03	44		0.00
13	2052				44		0.00
14	1976	0.84	0.01	1.06	44	41	0.00
15	2012	0.87	0.01	1.11	44	25	0.00
16	2174	0.80	0.01	1.04	44	20	0.00
17	2030	0.81	0.01	1.10	44	30	0.00
18	2013	0.87	0.01	1.05	44	33	0.00
19	1986	0.81	0.01	1.03	43		0.00
20	1897				43		0.00
21	1984	0.83	0.01	1.06	42	33	0.00
22	2038	0.82	0.01	1.04	42	30	0.00
23	2166	0.90	0.01	1.09	42	33	0.00
24	2111	0.82	0.01	1.06	42	34	0.00
25	1955				42		0.00
26	1842	0.83	0.01	1.08	42		0.00
27	1824				42		0.00
28	1955	0.88	0.01	1.02	42	27	0.00
29	2158	0.90	0.01	1.03	42	28	0.00
30	1991	0.87	0.01	1.06	42	32	0.00
31	1877	0.84	0.01	1.02	42	30	0.00
Sum:	**60955**						**0.00**
Avg:	**1966**	**0.82**	**0.01**	**1.06**	**45**	**32**	**0.00**
Max:	**2174**	**0.90**	**0.01**	**1.14**	**50**	**49**	**0.00**
Min:	**1804**	**0.74**	**0.01**	**1.02**	**42**	**5**	**0.00**

Reported By: Mark Elkouchi

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VILLAGE OF HINSDALE, PLANT REPORT

Month: December, 2009

Day	Flow			CL_2 Residual		Turbidity	Fluoride	H_2O Temp	Air Temp	Total
	Valve 1 (kgal)	Valve 2 (kgal)	Total (kgal)	Analyzer (ppm)	Lab (ppm)	Average (NTU)	Average (ppm)	Average (F)	Average (F)	Precip (in)
1	1875	0	1875	0.74	0.82	0.01	1.09	50	45	0.00
2	1882	0	1882	0.74	0.81	0.01	1.08	50	49	0.00
3	1805	0	1805	0.73	0.79	0.01	1.06	50	48	0.00
4	1804	0	1804	0.72	0.80	0.01	1.04	48	37	0.00
5	1862	0	1862	0.72	0.77	0.01	1.14	48	30	0.00
6	1826	0	1826	0.71	0.74	0.01	1.12	48		0.00
7	1823	0	1823	0.71	0.76	0.01	1.10	48	34	0.00
8	1888	0	1888	0.70	0.78	0.01	1.08	48	34	0.00
9	2033	0	2033	0.70	0.82	0.01	1.06	47	33	0.00
10	1910	0	1910	0.70	0.81	0.01	1.06	47	5	0.00
11	2087	0	2087	0.72	0.83	0.01	1.04	47	25	0.00
12	2119	0	2119	0.83	0.81	0.01	1.03	44		0.00
13	2052	0	2052	0.81				44		0.00
14	1976	0	1976	0.80	0.84	0.01	1.06	44	41	0.00
15	2012	0	2012	0.79	0.87	0.01	1.11	44	25	0.00
16	2174	0	2174	0.78	0.80	0.01	1.04	44	20	0.00
17	2030	0	2030	0.78	0.81	0.01	1.10	44	30	0.00
18	2013	0	2013	0.78	0.87	0.01	1.05	44	33	0.00
19	1986	0	1986	0.78	0.81	0.01	1.03	43		0.00
20	1897	0	1897	0.78				43		0.00
21	1984	0	1984	0.79	0.83	0.01	1.06	42	33	0.00
22	2038	0	2038	0.78	0.82	0.01	1.04	42	30	0.00
23	2166	0	2166	0.77	0.90	0.01	1.09	42	33	0.00
24	2111	0	2111	0.76	0.82	0.01	1.06	42	34	0.00
25	1955	0	1955	0.76				42		0.00
26	1842	0	1842	0.77	0.83	0.01	1.08	42		0.00
27	1824	0	1824	0.77				42		0.00
28	1955	0	1955	0.78	0.88	0.01	1.02	42	27	0.00
29	2158	0	2158	0.78	0.90	0.01	1.03	42	28	0.00
30	1991	0	1991	0.78	0.87	0.01	1.06	42	32	0.00
31	1877	0	1877	0.78	0.84	0.01	1.02	42	30	0.00
Sum:	**60955**	**0**	**60955**							**0.00**
Avg:	**1966**	**0**	**1966**	**0.76**	**0.82**	**0.01**	**1.06**	**45**	**32**	**0.00**
Max:	**2174**	**0**	**2174**	**0.83**	**0.90**	**0.01**	**1.14**	**50**	**49**	**0.00**
Min:	**1804**	**0**	**1804**	**0.70**	**0.74**	**0.01**	**1.02**	**42**	**5**	**0.00**

VILLAGE OF HINSDALE, PLANT REPORT

Month: December, 2009

Day	Flow	Tank Levels			Pressures		Pump Run Times		
	Total (kgal)	Standpipe (ft)	Clearwell (ft)	GSR (ft)	Upstream (psi)	System (psi)	HSP1 (hr)	HSP2 (hr)	HSP3 (hr)
1	1875	90.9	9.4	16.3	94.0	63.7	0.0	0.0	5.2
2	1882	91.0	9.5	16.4	94.3	63.8	0.0	0.0	4.4
3	1805	91.0	9.6	16.5	93.8	63.7	0.0	0.0	4.6
4	1804	90.6	9.0	15.8	93.4	63.3	0.0	0.0	5.3
5	1862	90.9	9.4	16.3	93.9	63.7	0.0	0.0	5.5
6	1826	90.9	9.6	16.5	93.7	63.7	0.0	0.0	4.8
7	1823	90.7	9.6	16.4	93.8	63.6	0.0	0.0	5.5
8	1888	90.7	9.4	16.3	94.1	63.6	0.0	0.0	4.7
9	2033	90.8	9.4	16.3	93.8	63.7	0.0	0.0	3.3
10	1910	90.7	9.5	16.3	93.9	63.6	0.0	0.0	5.3
11	2087	90.7	9.4	16.3	93.9	63.6	0.0	0.0	3.6
12	2119	92.1	9.0	16.0	93.9	64.1	0.0	0.0	3.9
13	2052	91.6	9.5	16.5	94.1	64.1	0.0	0.0	4.5
14	1976	91.4	9.6	16.6	94.1	64.0	0.0	0.0	5.0
15	2012	91.2	9.6	16.5	94.2	63.9	0.0	0.0	5.5
16	2174	91.2	9.5	16.5	93.9	64.0	0.0	0.0	5.4
17	2030	91.1	9.5	16.5	93.9	63.9	0.0	0.0	4.8
18	2013	91.1	9.5	16.5	93.9	63.9	0.0	0.0	5.4
19	1986	91.2	9.1	16.0	94.3	64.2	0.0	0.0	4.8
20	1897	91.2	9.4	16.4	94.6	64.1	0.0	0.0	5.1
21	1984	90.9	8.8	15.7	95.3	63.4	0.0	0.0	5.7
22	2038	90.9	9.0	15.9	94.5	63.8	0.0	0.0	5.3
23	2166	91.1	9.1	16.1	94.4	64.0	0.0	0.0	5.2
24	2111	91.0	9.2	16.2	94.3	63.9	0.0	0.0	5.7
25	1955	91.0	9.4	16.3	94.0	63.9	0.0	0.0	4.8
26	1842	91.1	9.5	16.4	93.9	63.9	0.0	0.0	5.0
27	1824	91.0	9.5	16.4	93.8	63.9	0.0	0.0	5.1
28	1955	90.9	9.5	16.4	93.9	63.9	0.0	0.0	5.5
29	2158	91.0	9.4	16.4	93.9	63.9	0.0	0.0	4.7
30	1991	91.0	9.4	16.4	94.0	63.9	0.0	0.0	4.8
31	1877	91.0	9.5	16.4	94.0	63.9	0.0	0.0	5.7
Sum:	**60955**						**0.0**	**0.0**	**154.1**
Avg:	**1966**	**91.0**	**9.4**	**16.3**	**94.0**	**63.8**	**0.0**	**0.0**	**5.0**
Max:	**2174**	**92.1**	**9.6**	**16.6**	**95.3**	**64.2**	**0.0**	**0.0**	**5.7**
Min:	**1804**	**90.6**	**8.8**	**15.7**	**93.4**	**63.3**	**0.0**	**0.0**	**3.3**

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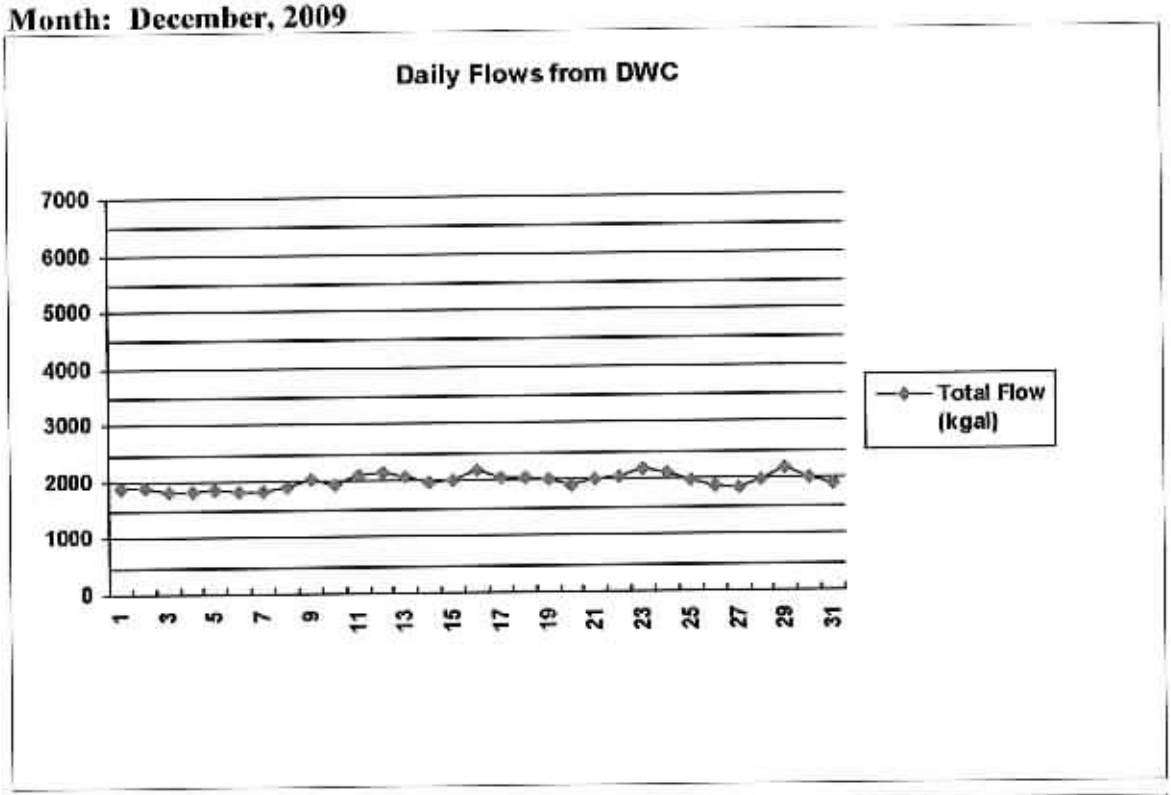
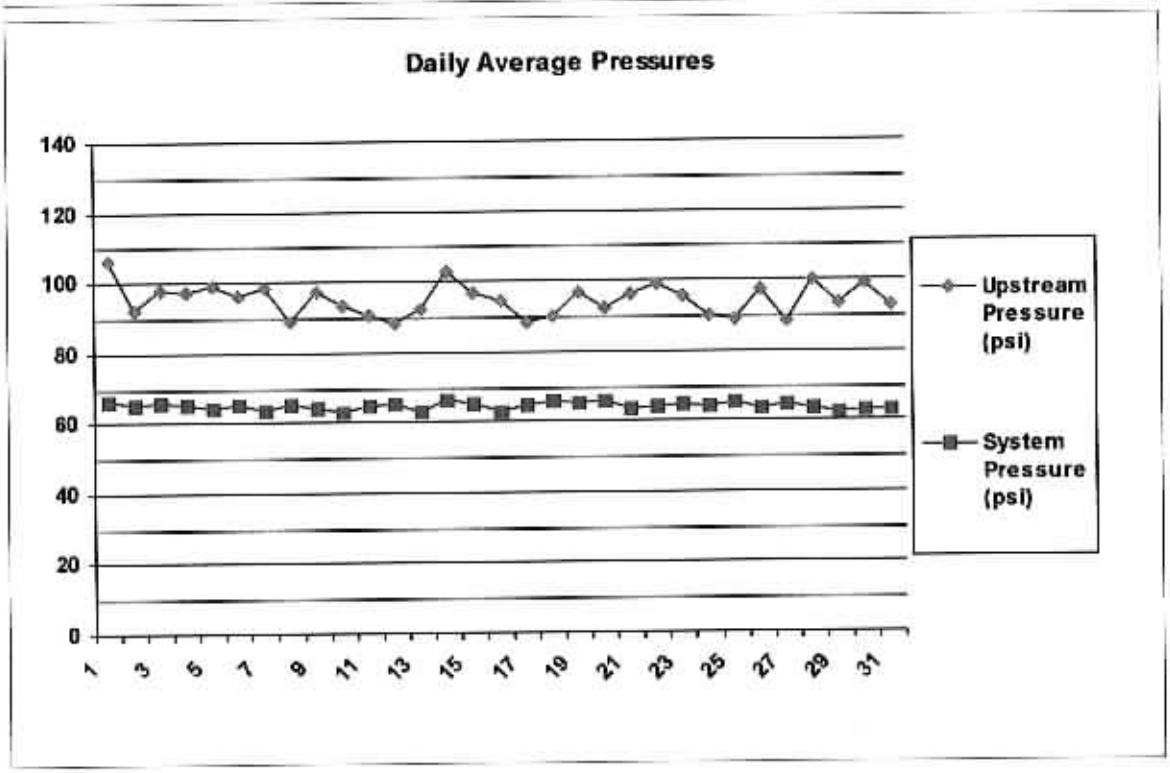
VILLAGE OF HINSDALE, SYSTEM TRENDS

Month: December, 2009





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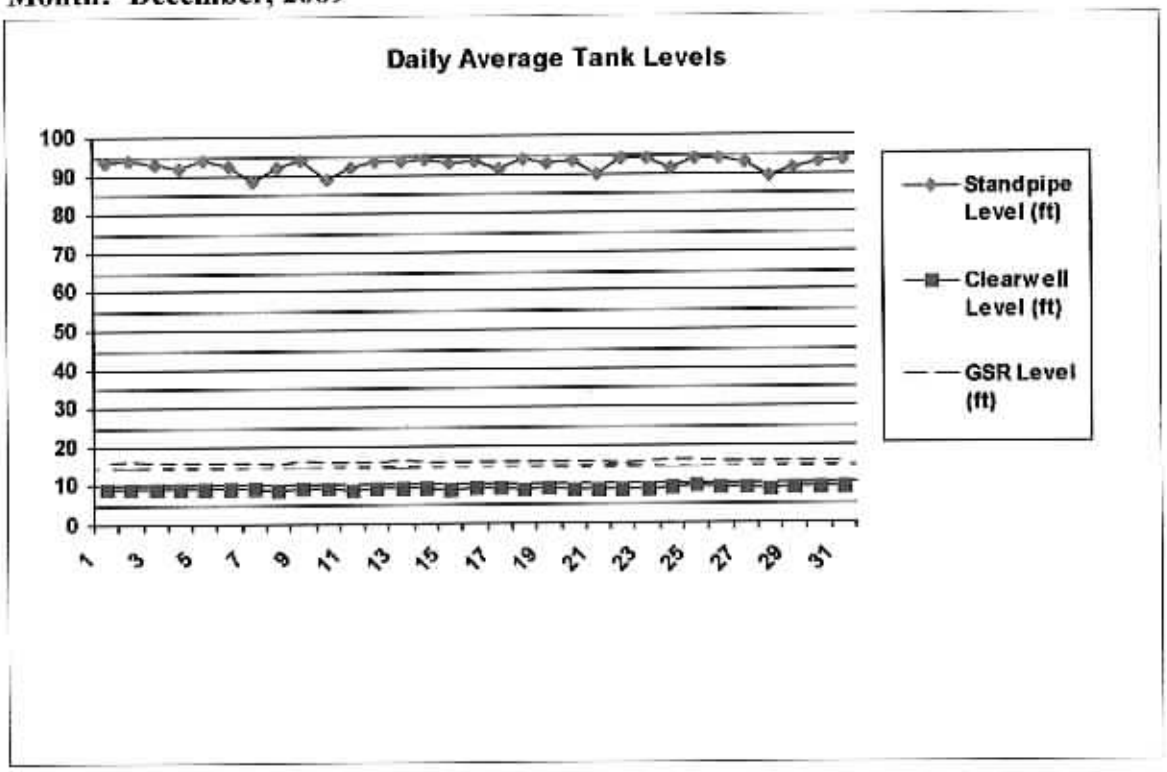
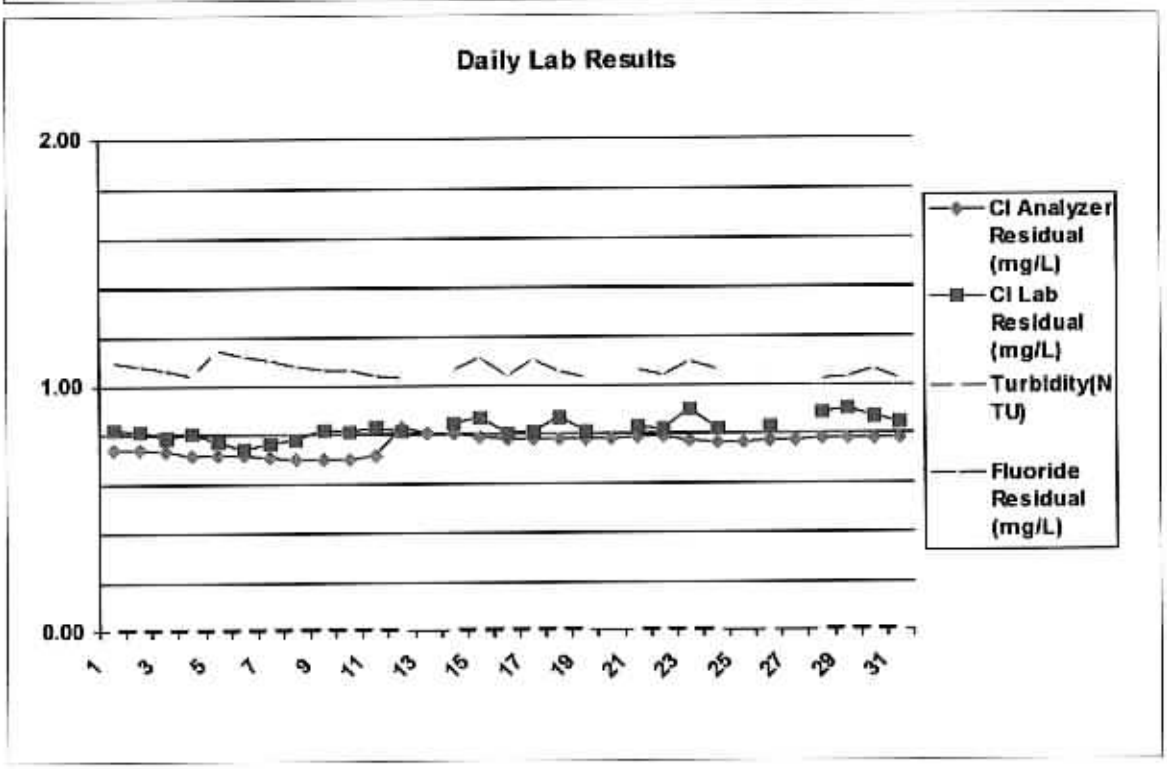
VILLAGE OF HINSDALE, SYSTEM TRENDS

Month: December, 2009





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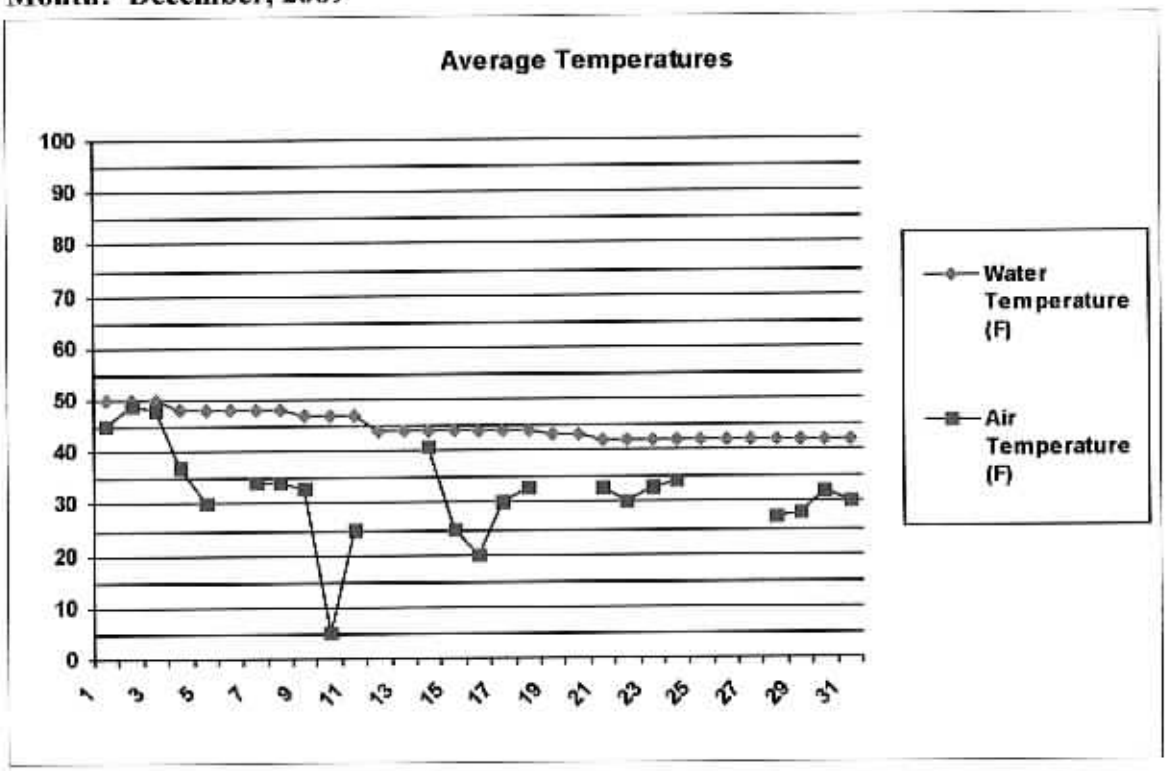
VILLAGE OF HINSDALE, SYSTEM TRENDS

Month: December, 2009



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MONTHLY REPORT FOR December 2009

# of Bacteria samples	25
# of field chlorine	21
# of field turbidities	21
# of lab chlorine	27
# of lab turbidities	27
# of lab pH	27
# of lab fluoride	27
# of precipitation readings	0
# of temperature readings(air)	23
# of temperature readings(water)	27
# of DBP samples	0
# of Pumps serviced	8
# of Water Restriction Notices	0

High Service and Well Pump Maintenance

December 2009

High Service Pump Motors

High Service Pump Motor #1- Check oil and lubricate grease fittings

High Service Pump Motor #2- Check oil and lubricate grease fittings

High Service Pump Motor #3- Check oil and lubricate grease fittings

High Service Pump Motor #4- Check oil and lubricate grease fittings

Well Pump Motors

Well #2 Pump Motor- Check oil, grease fittings, ran for Bacteria Testing

Well #5 Pump Motor- Check oil, grease fittings, and ran for Bacteria Testing

Well #8 Pump Motor- Check oil, grease fittings, and ran for Bacteria Testing

Well #10 Pump Motor- Check oil, grease fittings, and ran for Bacteria Testing

MEMORANDUM

TO: Chairman LaPlaca and EPS Committee

FROM: **Engineering Department**

DATE: **January 11, 2010**

RE: **Engineering Monthly Report**

The Engineering Division has continued to work with the Building Division in order to complete site inspections, as well as responding to drainage complaint calls. In total, 64 site inspections were performed for the month of December by three Engineering employees.

In addition to site management, the following capital improvement projects and engineering studies are also underway.

Veeck Park Wet Weather Facility

Construction was slower this month due to the weather and holiday season. John Burns Construction has continued with construction of the underground storage tank, components within the screening building, and back-filling around the storage tank. The SCADA system remains the critical factor in achieving operational completion of the Wet Weather Facility. John Burns Construction continues to anticipate operational completion by mid-February. Final completion is anticipated in early May 2010.

From December 15 – January 11 (December EPS – January EPS), John Burns Construction Company has conducted the following activities:

- Continued to install mechanical/electrical/plumbing (M/E/P) fixtures in the screening building. Conducted start-up of the break-tank apparatus.
- Poured the concrete retaining wall south of the skate park to accommodate the access road.
- Re-installed the storm sewer the drains the softball outfield.
- Installed the light pole removed to accommodate the overdig.
- Finished installing one 24" and two 6" discharge pipes from the storage tank.
- Continued construction in and around the underground storage tank including
    - Backfilled to the top of the tank (the highest backfill is 6 feet above the tank).
    - Waterproofed the storage tank roof.
    - Installed the flushing gates' controller.

Work in the near future includes:

- Continue installing and start-up checks for mechanical/electrical/plumbing components within the Screen Building.
- Install the hand rail on the retaining wall.
- Drywall the ceiling of the screening buildings.

The Third and Princeton Combined Sewer Overflow (CSO) is waiting on the IEPA to review the Village's "CSO Long Term Control Plan" and to modify the National Discharge Elimination System (NPDES) permit to include the CSO at Third and Princeton. The IEPA will forward a pre-publication draft of the revised permit to the Village. Upon Village concurrence, the permit then would be subject to a 30-day public comment period. If there are no comments, then the revised permit would be issued.

Huff & Huff has applied for a construction permit to the IEPA. Once the construction permit is approved, we anticipate construction on the facility in the Spring 2010.

2009 Road Program

The following is a summary of the 2009 Road Program schedule in 2009. Swallow Construction was the low bidder from the bid letting on 11/06/09 with a bid of $2.33M. This is below the engineer's estimate of $2.56M.

SEC Group supplemental Engineering Services authorized	04/07/09
DMMC approved $1.6M for Garfield Project	04/15/09
Village submits to IEPA for additional funds for Sewer Separation	04/29/09
Phase 1 design approval and environmental clearance from IDOT	07/15/09
Pre-final plans submitted	07/09/09
IDOT Pre-final plan comments returned	08/10/09
Final Mylar plans submitted to IDOT	08/17/09
Contract advertised for bid	10/02/09
Contract bid letting	11/06/09
Pre-construction meeting	01/11/09
Earliest anticipated construction start date (Spring 2010)	±03/15/10
Construction completed	12/01/10

$1.62M is available through IDOT-administered stimulus funds. $1,335,646.30 of the $2,330,000 bid by Swallow Construction is eligible for the IDOT stimulus funds. The Village is working with the IEPA to secure low-interest loans for the remaining $994,353.70 plus a comparable portion of the engineering fees.

State and Federal Funding Opportunities

A summary of the Grant Funds Awarded to or Applied for by the Village of Hinsdale is attached.

Monroe Street Grade Crossing Improvements

The Illinois Commerce Commission (ICC) has selected the Monroe Street at-grade crossing of the Burlington Northern Santa Fe (BNSF) tracks to be improved as part of a pilot program funded by the ICC. The main improvement will provide four crossing gates at the crossing in order to stop vehicles from driving around crossing gates when they are down. The Village has designed the crossing approaches and forwarded it to the ICC. The ICC is designing the quad-gate system. The improvements are anticipated to be installed in the Spring of 2010.

West Grant Village Road Dedication Request

Staff has been approached by representatives of the West Grant Village Home Owners Association asking to dedicate West Grant Village Road to the Village to be used as a public right of way. Staff is reviewing the issues involved in this dedication process.

cc: President and Board of Trustees
David Cook

Village of Hinsdale
Grant Funds Awarded in 2009

Source	Program	Purpose	Funds Available	Amount
DuPage Mayors & Managers	Federal Stimulus	S. Garfield Reconstruction	Paid Through IDOT	$1,632,000
Representative Bellock	State Capital Bill	N. Washington Reconstruction	July, 2010	$340,000
Senator Dillard	State Capital Bill	Oak Street Bridge	July, 2010	$825,000
New Local Transportation Projects	State Capital Bill	Road Improvements	July, 2010	$394,443
Dillard/ Bellock	State Capital Bill- Emergency Repairs	2009 Resurfacing Program	September, 2009	$300,000
Total				$3,491,443

Village of Hinsdale
Grant Funds Applied for/to be Applied for in 2009

Source	Program	Purpose	Status	Amount
IEPA**	State Revolving Loan	Garfield Sewer Separation	IEPA to award in September	$1,797,750
IEPA**	State Revolving Loan	Chestnut Sewer Separation	IEPA to award in September	$5,140,760
Congresswoman Biggert	Federal Transit Bill	Oak Street Bridge Feasibility	In Transportation Committee	$890,000
US Dept. of Transportation	TIGER Grant	Oak Street Bridge -100% Funding	9/15 Application Deadline	$22,845,000
IDOT	Bridge Replacement Program	Oak Street Bridge - 80% Funding	Fall Application Deadline	$16,000,000
Total				$46,673,510

MEMORANDUM

TO: CHAIRMAN LAPLACA AND EPS COMMITTEE

FROM: DAN DEETER, VILLAGE ENGINEER

DATE: JANUARY 11, 2010

SUBJECT: DISCUSSION OF THE VILLAGE OF HINSDALE SIDEWALK POLICY FOR NEW CONSTRUCTION

Recent discussions regarding sidewalk construction in the Village right-of-way during construction of new residential or commercial properties has prompted a review of the Village sidewalk policy as it pertains to new residential or commercial construction. Below is a review of the recent history of the Village's sidewalk policy, the surrounding communities' sidewalk policies, and staff recommendations.

Recent Sidewalk Policy History

January 2000: The Board of Trustees adopted a policy for evaluating requests from residents for the construction of new sidewalks. Depending upon pedestrian traffic volume or surrounding resident support, the Village could participate in the cost of adding sidewalk.

October 2002: The Board of Trustees adopted a policy establishing a sidewalk master plan. This plan showed existing sidewalk and proposed sidewalks to complete a "network of links". These proposed sidewalks would be installed at Village expense. The "existing petition process" was preserved.

January 2006: The Board of Trustees approved changes to the sidewalk master plan. These changes include input from staff, public and private schools.

August 2007: The EPS committee worked "with schools, staff, and the Police Department to put together a 3-year plan to complete what was identified as the critical sidewalk network." This "critical sidewalk network" includes most, but not all, of the proposed sidewalks on the sidewalk master plan. The EPS committee directed that the "critical sidewalk network" should be posted on the Village website.

For at least the past twelve months, it has been a verbal policy to require private homebuilders to install public sidewalks where warranted either by the Village's master sidewalk plan or at those locations in proximity to local schools.

Other Municipalities' Sidewalk Policies

A summary of other municipalities' sidewalk policies for new construction is attached. In general, the spectrum runs from no sidewalk policy to requiring all contractors to construct sidewalks across the lot frontage throughout the village. Approximately 70% of the municipalities in the survey required sidewalks to be installed during new construction at the resident's expense. One third of these municipalities allowed a fee in lieu of the sidewalk construction. Two thirds of these municipalities applied the sidewalk requirements to the entire community.

Staff Recommendations

In the interests of public safety, it is Staff's recommendation that sidewalks should ultimately be constructed on both sides of all streets throughout the Village. This recommendation creates issues that this committee, like previous committees, must consider. These include:

- Sidewalks change the character and aesthetics of existing neighborhoods that currently do not have sidewalks.
- The construction of sidewalks may adversely impact existing parkway trees.
- If installed on an individual lot basis, the appearance and functionality of a sidewalk that does not extend fully through a block.
- The impact of sidewalks on adjacent home owners versus the benefits to the general public.

With these issues in mind, Staff has established the following options for consideration.

Option 1: That the committee recommend approval of the 11/19/09 Sidewalk Master Plan which reflects the Sidewalk Master Plan approved by the Board of Trustees on 01/17/06, updated to reflect the sidewalks constructed to date.

Option 2: For all new construction or tear-down/re-development, a new sidewalk shall be constructed across the lot's frontage.

Option 3: For only those locations requiring a sidewalk per the Sidewalk Master Plan, upon new construction or tear-down/re-development, a new sidewalk shall be constructed across the lot's frontage at the resident's expense.

Option 4: For those locations not requiring a sidewalk per the Sidewalk Master Plan, upon new construction or tear-down/re-development, either a new sidewalk will be constructed at the resident's cost or an equivalent monetary contribution will be considered in-lieu-of the sidewalk construction. The Village would use the monies contributed toward the installation of public sidewalks per the Sidewalk Master Plan.

cc: President and Board of Trustees
Dave Cook, Village Manager

Community Research Summary for Questions Related to the Installation of Sidewalks for New Single Family Homes[1]

Community	Requires Sidewalk Installation[2]	Home Rule	Fee in Lieu of Sidewalk	Does Sidewalk Policy Apply to Entire Community?
Clarendon Hills[3]	**Yes**	No	Yes	Yes
Darien	**Yes**	Yes	Yes	Major Arterial Streets Only
Highland Park[4]	**Yes**	Yes	No	Yes
Naperville	**Yes**	Yes	No	Yes
Downers Grove	**Yes**	Yes	No	Yes
Lombard	**Yes**	No	No	Yes
Glen Ellyn	**Yes**	Yes	Yes	Yes
Western Springs	**Yes**	No	No	Designated Neighborhoods
Elmhurst	**Yes**	Yes	No	Designated Neighborhoods
Burr Ridge	**No**	No	N/A	N/A
Lake Forest	**No**	Yes	N/A	N/A
Long Grove	**No**	No	N/A	N/A
LaGrange	**No**	No	N/A	N/A

Notes:

1. All information was gathered via telephone conversations with representatives from each community.

2. Each Community that requires sidewalk installation for new single family homes permits variations to the sidewalk route to avoid parkway trees.

3. The Village of Clarendon Hills may require residents of a new single family home to grant an easement onto private property if a sidewalk cannot be installed on Village right of way.

4. The Village of Highland Park permits the movement of parkway trees to a new location if they interfere with the installation of a sidewalk and if the tree is anticipated to survive the transfer (as determined by the City Forester).

Christine Bruton

From: David Cook
Sent: Tuesday, January 05, 2010 8:07 AM
To: Christine Bruton
Cc: Daniel Deeter
Subject: FW: Suggestions for a written sidewalk policy

Chris,
Please print out for Board.

From: [redacted]
Sent: Tue 1/5/2010 12:48 AM
To: David Cook
Subject: Re: Suggestions for a written sidewalk policy

To: the Village of Hinsdale President and Trustees and Mr. David Cook

I wish to present some comments on the issue of sidewalks that has recently occupied your concerns and the concerns of a number of residents. It appears that the lack of a written policy on sidewalks has been one cause for the difficulties experienced and I believe the Village is considering the formulation of a sidewalk policy.

The written sidewalk policy of the Village of Hinsdale should emphasize that sidewalks are a safety issue and because of this there is little room for challenges. The long term Village goal should be that sidewalks are present on both sides of every street, and that all new construction should require a sidewalk. If this policy is not rigidly enforced, there will be never-ending disputes. Disputes occur when owners of property on one side of the street do not want a sidewalk along their side of the street. This usurps the rights and personal safety of the home-owners on the whole square block. Even if the owners on a whole square block do not want sidewalks, that infringers on the rights and safety of owners of property on adjacent streets. So the decision on sidewalks should no longer be a debatable issue and sidewalk decisions should reside solely with the village. Where there is no sidewalk on both sides of the street or streets, the Village engineer should make the decision as to the best complete route without public debate or input. A complete route implies that there is a planned route that is continuous along adjacent streets and has the promise of total completion within the shortest time. For example if streets A to B and B to C have no complete sidewalk, then it makes sense to plan for the most easily constructed complete sidewalk all the way from A to C .

The issue of trees sometimes gets mixed in the sidewalk debates. If the trees are in the Village easement, the village should be the sole decider of the placement of sidewalks. It seems to me unreasonable for a property owner to plan to construct a driveway so close to trees that trees will be threatened, and then at the same time object to a sidewalk as a threat to Parkway trees. In any event the Village does not need public debate on how to build and place a sidewalk on the Village easement. The Village has vast experience on these matters. Of course, there should be appropriate notification of a planned sidewalk with each individual homeowner affected. There is much flexibility in the construction of sidewalks. For example, there is a side walk that extends to and is along the curb on 6th street between Washington and Garfield. It is also possible for sidewalks to be built that are shallower resulting in less compaction on the root structure of a tree. Building a sidewalk is not major excavation project like a driveway since the design load is much much smaller.

In conclusion, the planning and placement of sidewalks is a public safety issue and as such should not be subject to debate. Somehow this message has not been made forcefully enough because some residents feel that the resolution of sidewalk issues ultimately involves some sort of homeowner lobbying process. The end result is that Village resources and talent are tied up in extended fruitless public meetings about the self-interests of a small number of homeowners rather than being focused on the basic issue of public safety. Public safety in this note is not used as a vague concept but rather is directed to protecting pedestrians who would be in increased danger without sidewalks.

Respectfully submitted,

[redacted]

DATE January 5, 2010

AGENDA EPS AGENDA **SECTION NUMBER**	**ORIGINATING** **DEPARTMENT** PUBLIC SERVICES
ITEM DOWNTOWN LANDSCAPING BID	**APPROVAL**

Public Services staff has received 5 bids on January 5, 2010 for the Downtown Landscaping Contract for which there is $62,000.00 budgeted. The low bidder for this service was McFarlane Douglass & Co., with a bid comparison price of $56,499.85. A bid comparison is attached.

Public Services staff would like to recommend to Committee the award of bid #1464 for the service of Downtown Landscaping to McFarlane Douglass & Co., and if the Committee concurs the following motion would be appropriate:

MOTION: To recommend to the Board of Trustee's the award for bid #1464 for the service of the Downtown Landscaping Contract to McFarlane Douglass & Co. in the comparative bid amount of $56,499.85.

STAFF APPROVALS				
APPROVAL	**APPROVAL**	**APPROVAL**	**APPROVAL**	**MANAGER'S APPROVAL**

COMMITTEE ACTION:

BOARD ACTION:

PROJECT NUMBER: #1464

PROJECT NAME: DOWNTOWN LANDSCAPING

DATE: 1/05/10

BUDGET:

ACCOUNT:

Name:	CLAUSS BROTHERS, INC.	CLARENCE DAVIDS & CO.	THE TLC GROUP	KINSELLA LANDSCAPE INC.
Address:	360 W. SCHAUMBURG RD. STREAMWOOD, IL 60107	23900 W. 127TH ST. PLAINFIELD, IL 60585	751 N. BOLINGBROOK DR. BOLINGBROOK, IL 60440	13821 S. HARRISON BLUE ISLAND, IL 60406
Bid Security:	10% BOND	10% BOND	10% BOND	$6906.00 CHECK

Item No.	Description	Unit	Qty Est	Unit Price	Extended Total	Unit Price	Extended Total	Unit Price	Extended Total	Unit Price	Extended Total
1	DOWNTOWN LANDSCAPE MAINTENANCE		1	68239.65	68239.65	67876.00	67876.00	58966.85	58966.85	69054.94	69054.94

Name	McFARLANE DOUGLASS CO.
Address:	143 TOWER DR. BURR RIDGE, IL 60527
Bid Security:	$5650.00 CHECK

Item No.	Description	Unit	Qty Est	Unit Price	Extended Total
1	DOWNTOWN LANDSCAPE MAINTENANCE		1	56499.85	56499.85

MEMORANDUM

TO: CHAIRMAN LAPLACA AND THE EPS COMMITTEE

FROM: DAN HOPKINS

DATE: JANUARY 6, 2010

RE: **Annual IPM Review Meeting**

According to the IPM Policy the EPS Committee shall review at a regular or special committee meeting the issue of Integrated Pest Management. This meeting shall be held between December 1st – February 28th. Staff recommends the February 8th EPS Committee to include the Annual IPM Review Meeting. A notice of the IPM Review Meeting shall be published in a newspaper of general circulation by January 21st. As the acting Pest Management Coordinator, I ask that any technical or scientific questions regarding the compliance report be submitted in writing, no less than seven days before the IPM Review meeting.

cc: President & Board of Trustees
Dave Cook

MEMORANDUM

TO: Chairman LaPlaca & EPS Committee

FROM: Dan Hopkins

DATE: December, 29 2009

RE: IPM Compliance 2009

In accordance with the November 21, 1995, resolution that formalized the Integrated Pest Management Policy of the Village of Hinsdale, the following is the required annual report from the Pest Management Coordinator of compliance with this policy. Attached are tables that illustrate the Village's activities this year. The specifics of these activities are below:

1. Turf Maintenance

New grounds maintenance contracts went into effect May 1, 2009 incorporating the fertilizing and weed control procedures recommended by Dr. Fermanian in 1999 and reviewed in subsequent annual review meetings. The contract established unit prices for fertilizer and weed control.

Attached are tables that describe the locations at which fertilizing and weed control took place. There were two rounds of fertilizing and two rounds of weed control during the 2009 season. The areas covered by these activities are summarized.

Staff has developed quantitative and qualitative records to evaluate the performance of the turf maintenance activities. Staff visits each public grounds site and evaluates each space for turf density, weed content, and overall appearance. Each area was rated one through five with one being poor and five being excellent. Three rounds of visits were made this year. Appendix 1 describes the rating techniques.

As a result of the 1998 IPM annual meeting, the Committee established goals for the conditions of each turf use. Comparison with the established goals allows the Pest Management Coordinator to track the results of the Village's efforts. The trend is stable in all turf classes. Attached are a summary and tables.

Staff continued using the Aera-vator (aerator) that was purchased in 2008. This aerator shakes solid tines 4 to 4.5 inches into the soil to alleviate compaction. The aerator also has a seed box attachment that allows the operator to spread grass seed while aerating athletic fields. Over 1,000 lbs. of grass seed was spread during the 2009 season, and the initial results have been very promising. Approximately 400

lbs. of grass seed was spread at Robbins Park in the spring to repair the damaged football field. The remaining seed was spread throughout Village parks in September, which is the ideal time to plant cool season grass seed.

Spreading grass seed on existing turf is called overseeding. Overseeding is highly recommended by turf grass professionals as a way to repair damaged turf, increase turf density, and is also an effective form of weed control. Having a healthy, dense turf will reduce or eliminate the need for chemical pesticides.

Staff continued experimenting with corn gluten meal in 2009. Corn gluten meal is a non-toxic alternative to traditional, chemical-based weed and feed products. Corn Gluten Meal has shown some promise as a pre-emergent herbicide, but the results were not as effective as some of the pesticides the Village has used in the past. Staff would like to continue using Corn Gluten Meal to see if its effectiveness improves over time.

Staff also continued to experiment with Burn Out II as a post-emergent, non-selective herbicide in 2009. Burn Out II is a non-toxic, pet safe weed killer. In the summer 2009, Burn Out II was used to help eliminate weeds in numerous parks throughout the Village. It was also effective at eradicating poison ivy that was found at Ehret Park. Staff would like to continue using this product.

In November 2009, Village staff attended Safer Pest Control natural lawn care classes. These classes were designed to help reduce or eliminate our dependence on chemical pesticides. These classes offered instruction on effective ways to becoming a pesticide free community. Staff found these classes extremely helpful, but realize that in the long run cost is still the biggest obstacle. Chip Osbourne the keynote speaker at these classes developed a "Step by Step" Guide to Natural Turf Management. Staff incorporated some of the more cost-effective steps outlined by Mr. Osbourne to Melin Park in 2009. Steps that were taken included: soil testing, aerating, overseeding, and the use of corn gluten meal and Burn Out II. Overall, the turf at Melin Park is thriving, but weed levels are starting to rise. Staff believes the overseeding of Melin Park that was done in September 09 should help to out compete these weeds in 2010.

As suggested by Mr. Osbourne, Village staff had soil tests conducted on several Village parks in 2009. Soil tests can tell you the pH, soil texture, amount of N-P-K, iron, and other important elements that are essential for proper plant health. If soils can be brought into a good balance it can greatly reduce or eliminate the need for chemical pesticides and fertilizers. Soil tests were conducted at Brook Park, Jackson St. Prairie, Melin Park, Robbins Park (two areas), and Veeck Park (two areas). For the most part the soil in these parks is in very good health. The

phosphorous levels in all tests were adequate, so staff applied a phosphorous-free fertilizer in the spring and fall of 2009. Phosphorous run off can lead to excessive algae growth, which can have a serious impact on Illinois lakes and streams. In 2009, Wisconsin banned the sale and use of lawn fertilizers containing phosphorous.

Mr. Osbourne also suggested using gypsum as a way to correct salt damage to turf grass. Turf areas that receive excessive salt build up from sidewalks and roads will decline rapidly and weeds begin to take their place. Mr. Osbourne explained that applying gypsum to these areas can neutralize the salt and keep these turf areas healthy. Staff experimented with gypsum in spring 2009 and saw no difference between areas that were treated and areas that weren't.

Staff is currently experimenting with urea as an alternative to calcium chloride (salt) to melt snow and ice around the Memorial Building. Urea is a high nitrogen fertilizer that works as an effective way to melt snow and ice. Calcium chloride can be very toxic to turf grass and other plants. Urea on the other hand can be very beneficial to plants, as long as it is not over used.

In 2009, Melin Park was designated a "Pesticide Free Park". No chemical pesticides were used at Melin Park in 2009. Village residents now have an alternative to areas that may have been treated with chemical pesticides. Staff would like to make signage to inform residents that this area is now pesticide free.

2. Other Grounds Maintenance

All flower beds, shrub beds, and natural areas were weeded by Village personnel and under contract. All mowing was contracted. The Hinsdale 2025 surveys show strong support for increased garden areas.

Staff is planning prescribed prairie burns for Charleston Rd. Aquatic Garden and Jackson St. Prairie for spring 2010. Prescribed burns can be a very effective form of weed control and also help to invigorate native plants. In the spring of 2009, staff conducted a prescribed burn at Charleston Road. A burn was scheduled for the Jackson St. Prairie, but the weather did not cooperate, and the window of opportunity was lost. As early as June 2009 signs of improvement could be seen at Charleston Road and the results were overwhelmingly positive. Staff has been in contact with David Crooks who has been involved with prairie restoration for many years. He has offered his services and native prairie seed to the Village at no charge. Staff would like to work with Mr. Crooks to conduct these prairie burns in the spring of 2010. Applications for prescribed burn permits have been submitted and should be processed by early March.

3. Tree Preservation

Gypsy Moth and Emerald Ash borer (EAB) were both detected in Dupage and Cook Counties in 2008. Staff is working with the Illinois Department of Agriculture's Slow the Spread Program to help control these devastating pests. Information regarding these pests is available at the Public Services Department.

In 2010, Hinsdale lost 60 public elms and 58 private elms. A total of 436 elms received fungicide this year. The loss of treated trees is significantly lower than untreated tree loss. Only 4 elm trees that were treated in 08 and 09 were lost to DED. In the Hinsdale 2005 surveys, a large majority of respondents supported treating all public elm trees.

Due to budgetary constraints, no new trees were planted by the village in 2009. In years past, the Village would plant approximately 100-125 trees a year. Staff has been working with the Beautification Task Force to develop a Tribute Tree Program to help replenish the much needed tree stock. In November 2009, the Tribute Tree Program was approved by the Board of Trustees.

4. Mosquito Abatement

In 2003 the Village initiated a fourth cycle of inspection and treatment and paid for a trap in town to verify WNV presence. In 2006 this trap and County traps tested positive for WNV, which began the village wide adulticiding program.

During 2009 Illinois saw low levels of West Nile Virus (WNV). There were 4 human cases in Illinois. There were 1 case reported in Cook County and 0 cases in Dupage County.

5. Recommendations

Turf

a. Continue with grounds maintenance contracts for mowing and fertilizing.
b. Continue using corn gluten meal and Burn Out II as non-toxic herbicides.
c. Continue going to natural lawn care classes to keep abreast of new and innovative methods to help reduce our need of chemical pesticides.
d. Staff would like to continue soil testing on all major green spaces.
e. Allow staff to make "Pesticide Free Area" signs for Melin Park.
f. Staff does not recommend using any chemical pesticides to treat weeds in the spring of 2010. As of November 2009 turf conditions in most of the Village green spaces exceeded the action threshold. Meaning most of the turf in the Village is in good to excellent condition.

g. Staff would like to use the money for the spring 2010 pesticide treatment to buy more turf grass seed. Staff feels the overseeding done in spring and fall of 2009 has had outstanding results.
h. Approve the use of TriPower chemical pesticide fall 2010 (if necessary).
i. Allow staff to conduct prescribed burns for Charleston Rd. Aquatic Garden and Jackson St. Prairie for spring 2009.

Trees

a. No changes in tree management are recommended.

Mosquito Abatement

a. No changes in mosquito abatement are recommended.

6. Annual Pest Management Review Meeting

The November 1995 ordinance requires an annual review meeting to be held by the Environment and Public Services Committee sometime before the end of February. As the acting Pest Management Coordinator, I ask that any technical or scientific questions regarding the compliance report be submitted in writing, no less than seven days before the IPM Review meeting. It is appropriate that the EPS Committee make a motion to approve the report. Proper notice will be given.

Attached are the following:

IPM Maintenance Schedule
Turf Condition Rating Summary
Grounds Maintenance History
Acreage of Activities History
Elm Tree History
Weather Data
Guide to Natural Turf Management, by Chip Osbourne and Doug Wood
Village Soil Samples
Product Labels and MSDS Pesticide Reports

cc: President and Board of Trustees
Dave Cook
George Franco

VILLAGE OF HINSDALE

RESOLUTION NO. R95-20

WHEREAS, the limited use of carefully selected EPA-approved chemical pesticides on public property is appropriate and necessary to protect and preserve public property for use and enjoyment by the general public; and

WHEREAS, such limited use of chemical pesticides has no adverse effect on the overwhelming majority of all people; and

WHEREAS, the Village should, nevertheless, make every reasonable effort to limit its use of chemical pesticides on Village property and to make special provision for those few people with special sensitivity to such chemicals; and

WHEREAS, while the few people that suffer from special sensitivity to chemicals should be reasonably accommodated, their special condition cannot serve as a basis for making public policy relating to the general use of chemical pesticides on public property; and

WHEREAS, the Village and Diana Fleming, Douglas Fleming and Ruta Jensen have heretofore entered into a "Settlement Agreement Among the Village of Hinsdale, Diana Fleming, Douglas Fleming, and Ruta Jensen" relating to the use of chemical pesticides on Village land ("Settlement Agreement"); and

WHEREAS, pursuant to the Settlement Agreement, the Village has agreed to adopt a formal written policy for integrated pest management, a copy of which is attached to, and by this reference incorporated into and made a part of, this Resolution (the "IPM Policy"); and

WHEREAS, the IPM Policy is a written statement of the Village's current practices concerning the use of chemical pesticides on Village land; and

WHEREAS, the IPM Policy provides that the Village will take reasonable steps to minimize its use of chemical pesticides on Village land and will, when such use is necessary,

180

provide ample public notice so that persons with special sensitivity may take such precautions as they deem appropriate; and

WHEREAS, the President and Board of Trustees has determined that it is in the best interests of the Village to approve and adopt the IPM Policy; and

WHEREAS, the President and Board of Trustees reserves complete discretion to repeal or change the IPM Policy at any time and as may be determined to be necessary or appropriate in the best interests of the Village and all of its residents;

NOW, THEREFORE, BE IT RESOLVED by the President and Board of Trustees of the Village of Hinsdale, Cook and DuPage Counties, State of Illinois, THAT:

Section 1. Recitals. The foregoing recitals are incorporated in and made a part of this Resolution by this reference.

Section 2. Approval of IPM Policy. The IPM Policy is approved and adopted as the integrated pest management policy of the Village.

Section 3. Implementation of the IPM Policy. The Village Manager is hereby authorized and directed to take all actions necessary to implement the terms of the IPM Policy.

PASSED this twenty-first day of November, 1995.

AYES: TRUSTEES KESSENICH, GABLE, CONNOR, WANDS, WHITNEY AND KELLY.

NAYS: NONE.

ABSENT: NONE.

APPROVED this twenty-first day of November, 1995.

Joyce E. Storz
Village President

ATTEST:

Sharon Henderson
Village Clerk

VILLAGE OF HINSDALE

POLICY FOR INTEGRATED PEST MANAGEMENT

GENERAL PROVISIONS

I. APPLICABILITY

II. GENERAL POLICY

III. DEFINITIONS

IV. IPM PRINCIPLES

V. PEST MANAGEMENT COORDINATOR

VI. RECORD KEEPING

VII. LEGAL EFFECT OF POLICY

VIII. CONFLICTS WITH FEDERAL OR STATE LAW

INTEGRATED PEST MANAGEMENT POLICY DETERMINATIONS

IX. ANNUAL IPM REVIEW MEETING

SPECIFIC USE DETERMINATIONS

X. BOARD OF TRUSTEES APPROVAL

XI. CHEMICAL PESTICIDE SELECTION CRITERIA

XII. CHEMICAL PESTICIDE APPLICATION CRITERIA

XIII. NOTIFICATIONS

82

VILLAGE OF HINSDALE
INTEGRATED PEST MANAGEMENT POLICY

GENERAL PROVISIONS

I. APPLICABILITY

This Policy applies to all Village property and to all Village employees, contractors, subcontractors, consultants, and actual agents of the Village.

II. GENERAL POLICY

Village property is to be managed and maintained for the benefit of the general public in the manner that best protects and promotes the public health, safety, and welfare. In the management and maintenance of Village property, it is the policy of the Village that chemical pesticides shall be used only after a reasonable evaluation of alternatives and then only to the extent necessary. The Village shall follow a program of Integrated Pest Management ("IPM") to minimize reliance on chemical pesticides whenever possible and to maximize the advantages that alternative pest-control methods provide. The Village's IPM program shall be designed to prevent unacceptable levels of pest damage with the least possible hazard to the public health and the environment and to encourage reliance on long-term prevention rather than post-infestation cures.

III. DEFINITIONS

"Chemical Pesticide" means any chemical or mixture of chemicals (including both active and inert ingredients) principally intended to prevent, destroy, repel, or control pests. This includes (without limitation) chemicals directed against vertebrates, insecticides directed against insects, herbicides directed against plants, fungicides directed against fungi, and antibiotics or bactericides directed against bacteria. This term does not include materials or substances that may prevent, destroy, repel, or control pests as a subsidiary effect or consequence.

"Health Safety Information" means the information provided with respect to a particular chemical pesticide by the Material Safety Data Sheet and Specimen Label applicable to such chemical pesticide.

"Pest" means any vertebrate or invertebrate animal, plant, organism, bacterium, virus, or other biological agent that can cause disease or damage to vegetation, humans, animals, or property or any plant meeting the definition of a "weed" as set forth in the Illinois Pesticide Act.

"Village" means the Village of Hinsdale in the Counties of DuPage and Cook, Illinois.

"Village property" means all land owned or leased by the Village that is maintained by the Village and generally open to the public.

IV. IPM PRINCIPLES

The Village's integrated pest management activities shall be governed by the following principles:

A. A healthy turf is the best defense against unacceptable levels of pest infestation. Turf, trees, shrubs, and other vegetation on Village property shall be maintained in a manner that reasonably minimizes the need for chemical pesticide use. This includes maintenance of healthy plants through a program of fertilizing, pruning, and mowing to minimize stress and susceptibility to pests and the use of pest-resistant plant varieties. The choice of the best means of pest control depends on careful monitoring and requires a thorough knowledge of cultural practices and ecological effects.

B. Non-chemical methods of pest control shall be evaluated and used whenever possible to control pests on Village property. Chemical pesticides shall be used only after a reasonable evaluation of alternatives and only after other methods have been determined to be ineffective and then only to the extent necessary.

C. Chemical pesticides shall be applied in the manner that minimizes the possibility of migration beyond the specific pest or area targeted for treatment.

D. The Village recognizes the need to keep its residents informed about its use of chemical pesticides. Advance notification of all chemical pesticide applications shall be given to the public as provided in Paragraph XIII of this Policy.

E. Accurate records of all pest management activities employing chemical pesticides shall be maintained as provided in Paragraph VI of this Policy.

F. The Village shall keep abreast of new information and developments in the field of pest management.

G. Economy and aesthetics are valid considerations in pest management but shall not override substantial threats to the general public health or safety.

184

V. PEST MANAGEMENT COORDINATOR

A. The Village Manager shall designate a member of his or her staff to act as a Pest Management Coordinator.

B. The Pest Management Coordinator shall have no authority to modify or disregard this Policy.

C. The Pest Management Coordinator shall administer the Village's day-to-day pest management activities, advise the Village with respect to such activities, and consult with experts and receive public comments and questions regarding such activities.

D. The Pest Management Coordinator shall monitor all of the Village's pest management activities for compliance with this Policy. The Pest Management Coordinator shall, on or before December 1 of each year, prepare and present to the Environmental and Public Services Committee of the Village's Board of Trustees (the "EPS Committee") a written report on such compliance, which shall include any recommendations for improving the Village's pest management activities.

E. The Pest Management Coordinator shall keep abreast of new information, methods, and technologies in the field of pest management and shall consult with experts in the field as frequently as necessary to assure that the Village's pest management program is being kept reasonably current.

F. The Pest Management Coordinator shall collect or develop written materials that provide information to Village employees, contractors, and residents about pest management techniques, IPM principles, and the toxicity of various pesticides.

VI. RECORD KEEPING

A. The Pest Management Coordinator shall require that all Village employees, contractors, and subcontractors keep full and accurate records of all activities, plans, and proposals related to the use of chemical pesticides on Village property. Such records shall include at least all of the information listed in Paragraph XIII.A of this Policy.

B. The Pest Management Coordinator shall keep, in a separate "Application Log," an up-to-date compilation of each chemical pesticide application on Village property; the date of each application; the name, address, and telephone number of the applicator involved in each application; the trade name, common name, and quantity of each chemical pesticide used in each application; the area or location of each application; and the purpose of each application. The Pest Management Coordinator also shall keep a separate "Toxicity File" on each chemical pesticide used on Village property, labeled by the chemical pesticide's trade name and common chemical name, which file shall include health safety information relating to that chemical pesticide.

C. All documents referred to in this Policy shall be maintained for a period of at least ten years after they are generated.

D. Copies of all reports and other documents referred to in this Policy shall be accessible to the public for inspection and copying in accordance with the Village's Freedom of Information Act compliance program; provided, however, that the information referred to in Paragraph VI.B of this Policy shall be made immediately available to, or for the benefit of, persons suffering a medical emergency related to, or possibly related to, a Village application of any chemical pesticide (1) 24 hours a day, for at least 30 days following the application, at the Dispatcher's Desk of the Hinsdale Police Department and (2) thereafter, during normal business hours at the Office of the Village Clerk.

VII. LEGAL EFFECT OF POLICY

This Policy is adopted solely for the purpose of giving guidance to Village employees and contractors and is not intended to, and shall not be interpreted to, either create or diminish the rights of any person with respect to the matters addressed. Nor shall this Policy be used or applied as the basis for any claim or cause of action against the Village.

VIII. CONFLICTS WITH FEDERAL OR STATE LAW

The provisions of this Policy may be superseded by the direction or requirement of a federal or state agency, law, or regulation. In that event, this Policy shall be superseded only to the extent so directed or required and notification, posting, and record-keeping requirements under this Policy shall be followed to the maximum extent possible.

INTEGRATED PEST MANAGEMENT POLICY DETERMINATIONS

IX. ANNUAL IPM REVIEW MEETING

A. The EPS Committee shall review annually, at a regular or special committee meeting, the issue of integrated pest management (the "Annual Pest Management Review Meeting"). The Annual Pest Management Review Meeting shall specifically consider the issue of chemical pesticide use on Village property, alternative means for the management of pests on Village property, and any recommendations of the Pest Management Coordinator concerning pest management on Village property.

B. The Annual Pest Management Review Meeting shall be conducted at a regular or special EPS Committee meeting to be held between December 1 and February 28 on a week day at or after 7:00 p.m. Not more than 30 days nor less than 15 days before the

Annual Pest Management Review Meeting, notice of such meeting shall be published at least once in a newspaper of general circulation in the Village and shall also be mailed to all persons listed on the citizen registry required to be maintained pursuant to Paragraph XIII.D of this Policy. The notices of the Annual Pest Management Review Meeting shall include a solicitation of written information and comments concerning pest management on Village property and shall encourage public participation at the Meeting. Any technical or scientific information that any member of the public wishes to have considered at the Annual Pest Management Review Meeting shall be submitted to the Pest Management Coordinator at least 7 days in advance of the Meeting. At the Annual Pest Management Review Meeting, individuals shall be recognized for public comment, which may, at the discretion of the EPS Committee chairperson, be limited to five minutes for each individual.

C. After the Annual Pest Management Review Meeting, the EPS Committee shall submit a report of the meeting, including its recommendations, if any, for the use of pesticides on Village property to the Village's Board of Trustees and shall make copies of such report available to the public upon request.

D. Nothing in this Section IX shall preclude the Village's Board of Trustees or its committees from discussing or acting on matters related to IPM and pesticides at any other time or from authorizing the use of pesticides pursuant to other sections of this Policy.

SPECIFIC USE DETERMINATIONS

X. BOARD OF TRUSTEES APPROVAL REQUIRED

Application of a chemical pesticide to Village property shall occur only after the specific approval of each application or series of applications thereof by the Village's Board of Trustees pursuant to this Policy.

XI. CHEMICAL PESTICIDE SELECTION CRITERIA

No chemical pesticide may be used on Village property unless it has been approved for the intended use by the appropriate federal or state regulatory agencies.

XII. CHEMICAL PESTICIDE APPLICATION CRITERIA

No chemical pesticide shall be applied on Village property in any manner or by any means other than those authorized, or not prohibited, by applicable federal and state laws and regulations.

XIII. NOTIFICATIONS

A. Publication. At least one week before any planned chemical pesticide application, the Village shall publish notice of such application in a newspaper of general circulation in the Village. Such notice shall be a readily visible display advertisement and shall contain at least the following information:

(1) the projected dates and general locations of the application;

(2) the purpose of the application;

(3) the trade name and common chemical name of each chemical pesticide to be applied, with EPA registration number;

(4) the amount of diluted and undiluted chemical pesticide estimated to be used;

(5) the approximate boundaries or generally known name of the area intended to be treated;

(6) the method of application;

(7) the availability at the Village Hall of health safety information relating to each chemical pesticide to be applied; and

(8) the name and telephone number of the Village's Pest Management Coordinator.

B. Postings. At least three days before any planned chemical pesticide application, notices shall be conspicuously posted at each application site. Each notice shall state the projected date and time of application, the general location, the manner of application, and the trade and common chemical names of each chemical pesticide to be applied. It shall contain a warning not to enter a specified area for a specified period of time during and after application (the "Warning Period"). It also shall list the name and telephone number of the Pest Management Coordinator and shall state that health safety information relating to each chemical pesticide to be applied is available at the Village Hall. The Pest Management Coordinator shall take all reasonable steps to ensure that the notices remain posted and fully legible until the Warning Period expires. The postings shall remain until three days after the application, unless some longer period is required.

188

C. School Notification. When any chemical pesticide application is planned for an area adjacent to a public or private elementary school, or the Hinsdale Central High School, or along any route customarily used by significant numbers of children going to or from any such school, a notice of the type specified in Paragraph XIII.B above shall be delivered to the school or schools in question at least two days before the planned application.

D. Citizen Registry. Any Village resident who wishes to receive personal notice of chemical pesticide applications may enter his or her name in a Village registry to be maintained by the Pest Management Coordinator for an annual fee of $10.00. At least one week before any chemical pesticide application, the Village shall mail to each registered resident a notice containing the information listed in Paragraph XIII.A above. Upon request, the Village shall provide a copy of the current registry without charge to all commercial applicators.

Proposed 2010 IPM Maintenance Schedule

February 8th

a. IPM Annual Review Meeting.

March 1st

a. Seek permission to conduct prairie burns.
b. Submit prairie burn notification to a newspaper of general circulation in the Village of Hinsdale.
c. Notify neighboring residents of upcoming prairie burns.

March 15th

a. Conduct prairie burns on Jackson St. and Charleston Road (weather permitting).

April 1st

a. Continue corn gluten meal testing.
   Rate: 50lbs./2500sqft.
   - Treat Melin Park and KLM entrance beds with corn gluten meal.
b. First round of aeration program.
c. Overseed turf areas as needed.
   Rate: 3-4lbs./1000sqft.

May 17th

a. Spring Fertilization Program
   Type: Lesco 32-0-16 (NPK)
   Rate: 0.5lbs. N/1000sqft.

June 1st

a. Elm tree inoculation program.
   Type: Arbortech (EPA Reg 100-892)
   Rate: 12 fl. oz. for each 5 inches of diameter.
b. Mosquito abatement program.
   Type: VectoBac (EPA Reg 73049-38) (granular)
   Rate: 0.25-2qts./acre
   Type: Altosid (EPA Reg 2724-375)
   Rate: 1 briquet/100sqft. up to 2ft. deep of water.
   Type: Anvil (EPA Reg 1021-1688-8329)
   Rate: 1.9oz./acre at 5mph.
c. Second round of aeration program.

August 1st

a. Third round of aeration program.

b. Overseed turf areas as needed.
   Rate: 3-4lbs./1000sqft.
c. Add starter fertilizer to seeded areas.
   Type: Lesco 16-20-4 (NPK)
   Rate: Rate: 1lb./1000sqft.
d. Topdress areas with sand.
   - The IPM Manager is working with Parks and Recreation to try to close all athletic fields for the month of August. August has very little sports activity, and it would be a good time to do field maintenance.

September 1st

a. Early fall fertilization program (exclude areas seeded in August).
   Type: 24-0-16 (NPK)
   Rate: 1lb./1000sqft.

November 1

a. Forth round of aeration program.
b. Dormant seed turf areas as needed.
   Type: 25% bluegrass and 75% ryegrass
   Rate: 3-4lbs./1000sqft.
   - Grass seed sown in late fall will remain dormant till soil temperatures reach 50 degrees. Dormant seeding is a good way to ensure seeds germinate at the first available time in the spring.
c. Add starter fertilizer to seeded areas.
   Type: Lesco 16-20-4 (NPK)
   Rate: 1lb./100sqft.
d. Late fall fertilization program (exclude seeded areas).
   Type: Lesco 32-0-16 (NPK)
   Rate: 1.5lbs./1000sqft.

* All dates tentative and subject to change.

Appendix 1 – Rating Turf Areas

Unlike separate plots of farmland whose crops can be weighed and compared, turf areas are evaluated by the way they look, not what they produce. By definition any rating will be subjective. However, horticulturalists and other turfgrass professionals have developed a numerical rating system by which, plots of different grass seed mixes are compared in the National Turf Evaluation Program (NTEP). Several attributes of turf are rated on a 10-point scale then averaged together to create an overall number, which is used in comparisons, of for example, new variations of bluegrass.

Staff took a simplified approach, using only three attributes – turf density, weed content and overall appearance. Each attribute is rated from one (way below average) to 5 (way above average). Each turf area is classified by its use: high visibility, athletic, passive with foot traffic, passive without foot traffic or other.

Since 1996 sub-areas within locations have been identified and rated separately. A composite average equally weighing the three measures is computed next. An overall rating for each turf use is determined multiplying the sum of each place's rating average by its area and dividing by the total area of that turf use.

Here is a simple example of one turf type:

	Density	Weed	Appear.	Average	Area	Avg x Area
Park A	2	2	3	2.3	7 acres	16.1
Park B	3	3	3	3.0	1	3.0
Bldg C	3	4	5	4.0	2	8.0
					10 acres	27.1

Composite rating $\frac{27.1}{10} = 2.71$

Goals based upon the rating system were established in 1999. These are the ideals to which the turf management program strives, but they are also based in reality. Lawns of green carpet are not appropriate everywhere. Next the objectives, the practical gauges by which progress is assessed were set. Neither the goals nor the objectives should change often. Maybe in time, sights can be set higher.

The goals are as follows:

- High visibility areas shall be treated to maintain a well above average rating (4.0).
- Athletic areas shall be treated to maintain an above average rating (3.5).

- Passive areas with foot traffic shall be treated to maintain an above average rating (3.5).

- Passive areas without foot traffic shall be treated to maintain an average rating (3.0).

- Other areas shall be treated as appropriate to their use.

The objectives are based on a three-year basis and are 80% of the goals. They are:

• High visibility	3.2
• Athletic	2.8
• Passive with foot traffic	2.8
• Passive without foot traffic	2.4
• Other	as appropriate

The above numbers represent the action threshold. An action threshold is the point at which an IPM Coordinator should take action to improve the turf quality, by either increasing turf density, decreasing weed population, and/or improving overall appearance. Any area that falls below the action threshold should receive attention to bring the levels up to or above the action threshold. Methods that can help bring levels up to action threshold include: aerating, fertilizing (organic/inorganic), top dressing, overseeding, and weed control (organic/chemical).

Staff has discussed this methodology with its turf consultant, Dr. Fermanian. He thought the approach was reasonable and agreed that a three-year average is a long enough time frame to judge progress. Individual seasons of extreme weather may tilt study lengths of shorter duration.

The object of a turf management program is stability over time. Any activity influenced by weather will see periodic advances and declines. The goals and objectives allow the Village to look past the seasonal battles over turf growth to assess its long-term programmed approach reflected in the IPM policy. An analysis using these tools will reveal long-range trends.

TURF CONDITION RATING 2009

	SITE LOCATION	Apr-09 TURF DENSITY	Apr-09 WEED POPULATION	Apr-09 APPEARANCE	Action Threshold	Rating	Recommendations
	MEMORIAL BUILDING						
HV	NORTH	3	2	3	3.2	2.67	A,F,W
HV	SOUTH	3	2	3	3.2	2.67	A,F,W
HV	BURLINGTON PARK	3	2	2	3.2	2.33	A,F,W
P	SYMONDS DRIVE	2	2	2	2.4	2.00	A,F,S,W
HV	POLICE/FIRE BLDG	2	2	2	2.8	2.00	A,F,S,W
	WATER PLANT						
HV	WEST OF PLANT	2	2	2	2.8	2.00	A,F,S,W
P	S ALONG SYMONDS	3	2	3	2.4	2.67	A,W
PF	RESERVOIR	2	2	2	2.8	2.00	A,F,S,W
P	PUB WORKS GARAGE	2	2	2	2.4	2.00	A,F,S,W
P	BRUSH HILL	2	2	2	2.4	2.00	A,F,S,W
	PEIRCE PARK						
A	FAR EAST FIELDS	4	4	4	2.8	4.00	A,F
A	NEAR EAST FIELDS	3	2	3	2.8	2.67	A,F,W
PF	PASSIVE AREAS	2	2	3	2.8	2.33	A,F,S,W
A	WEST FIELD	4	3	4	2.8	3.67	A,F
P	RAVINE & CTY LINE	3	1	3	2.4	2.33	A,F,W
P	RAVINE & OAK	3	2	2	2.4	2.33	A,F,W
P	YORK & WALKER	2	2	2	2.4	2.00	A,F,S,W
P	MADISON @ OGDEN	2	2	2	2.4	2.00	A,F,S,W
	BURNS FIELD						
A	ICE RINK	2	1	1	2.8	1.33	A,F,S,W
A	SOCCER AREA	3	2	3	2.8	2.67	A,F,W
A	PLAYGROUND	3	2	3	2.8	2.67	A,F
PF	FRINGE	2	2	2	2.8	2.00	A,F,S,W
	STOUGH PARK						
A	ICE RINK	3	2	3	2.8	2.67	A,F,W
O	RAILROAD BANK	3	3	3	n/a	n/a	n/a
PF	EAST PASSIVE	3	3	3	2.8	3.00	A,F
PF	CENTRAL PASSIVE	3	3	3	2.8	3.00	A,F
PF	W HINSDALE STA	1	1	1	2.8	1.00	A,F,S,W
P	JACKSON: 4TH - 8TH	2	2	2	2.4	2.00	A,F,S,W
P	JACKSON PRAIRIE	5	3	5	2.4	4.33	S
A	MELIN PARK	4	2	3	2.8	3.00	A,F
A	DIETZ PARK	3	2	3	2.8	2.67	A,F,W

= Area has a rating that falls below the Action Threshold. Action should be taken to remedy this.

A = Aerate F = Fertilize S = Seed W = Weed Control

	SITE LOCATION	Apr-09 TURF DENSITY	Apr-09 WEED POPULATION	Apr-09 APPEARANCE	Action Threshold	Rating	Recommendations
	ROBBINS PARK						
A	NE - NORTH	3	2	3	2.8	2.67	A,F,W
A	NE - SOUTH	3	2	3	2.8	2.67	A,F,W
A	CENTRAL	2	2	2	2.8	2.00	A,F,S,W
A	SOUTHWEST	2	2	3	2.8	2.33	A,F,S,W
PF	PARKWAYS	3	2	3	2.8	2.67	A,F,W
A	FOOTBALL	1	2	1	2.8	1.33	A,F,S,W
	SWIMMING POOL						
PF	NORTH	1	2	2	2.8	1.67	A,F,S,W
PF	SOUTH	2	3	3	2.8	2.67	A,F,S
A	WEST	3	3	3	2.8	3.00	A,F
PF	EHRET PARK	2	3	2	2.8	2.33	A,F,S,W
P	HINS: STOUGH - GARF	2	1	2	2.4	1.67	A,F,S,W
HV	ELEANOR'S PARK	5	5	5	3.2	5.00	A,F
P	CHICAGO @ BNRR	3	3	3	2.4	3.00	A,F
	HIGHLAND PARK						
PF	PASSIVE	3	3	3	2.8	3.00	A,F
PF	PARKWAYS	2	2	2	2.8	2.00	A,F,S,W
A	VEECK PARK	2	2	3	2.8	2.33	A,F,S,W
P	CHICAGO @ PRINCE	3	2	3	2.4	2.67	A,F,W
P	1ST & PRINCETON	3	3	3	2.4	3.00	A,F
P	3RD & PRINCETON	3	2	3	2.4	2.67	A,F,W
P	COLUMBIA: 1ST - 3RD	3	3	3	2.4	3.00	A,F
	BROOK PARK						
A	PLAYING FIELD	3	2	3	2.8	2.67	A,F,W
PF	FRINGE AREAS	2	2	3	2.8	2.33	A,F,S,W
PF	6TH & PRINCETON	4	3	3	2.8	3.33	A,F
P	7TH & HARDING	3	3	3	2.4	3.00	A,F
PF	WOODLAND PARK	3	2	3	2.8	2.67	A,F,W
O	TAFT @ 55TH	1	1	1	n/a	n/a	n/a
P	7TH & WILSON	2	3	3	2.4	2.67	A,F,S
O	CLEVELAND @ 55TH	1	1	1	n/a	n/a	n/a
PF	WOODLAND DR ISLES	3	2	3	2.8	2.67	A,F,W
P	DALEWOOD ISLAND	3	2	3	2.4	2.67	A,F,W
P	COUNTY LINE CT	2	2	2	2.4	2.00	A,F,S,W
O	PAMELA CIRCLE	1	1	1	n/a	n/a	n/a
PF	CHARLESTON RD	3	2	3	2.8	2.67	A,F,W

= Area has a rating that falls below the Action Threshold. Action should be taken to remedy this.

A = Aerate F = Fertilize S = Seed W = Weed Control

	SITE LOCATION	Apr-09 TURF DENSITY	Apr-09 WEED POPULATION	Apr-09 APPEARANCE	Action Threshold	Rating	Recommendations
	KLM PARK						
HV	NEAR BUILDINGS	2	2	2	3.2	2.00	A,F,S,W
HV	CONCERT HILL	4	2	3	3.2	3.00	A,F,W
A	NORTH OF CREEK	3	2	3	2.8	2.67	A,F,W
A	EAST PLAY AREA	3	2	3	2.8	2.67	A,F,W
PF	SOUTH OF ROAD	2	2	2	2.8	2.00	A,F,S,W
PF	4TH ST ISLANDS	3	3	3	2.8	3.00	A,F
P	OAK @ 9TH	2	2	1	n/a	1.67	n/a
P	ELM ; 9TH - 55TH	2	2	2	2.4	2.00	A,F,S,W
PF	WASHINGTON CIRC	3	3	3	2.8	3.00	A,F
O	WASHINGTON LOT	1	1	1	n/a	n/a	n/a
PF	PARKWAYS @ HMS	1	1	1	2.8	1.00	A,F,S,W
O	LINCOLN LOT	2	2	2	n/a	n/a	n/a
O	VILLAGE LOT	1	1	1	n/a	n/a	n/a
O	W OF POST CIRCLE	1	1	1	n/a	n/a	n/a
A	DUNCAN FIELD	2	2	2	2.8	2.00	A,F,S,W

= Area has a rating that falls below the Action Threshold. Action should be taken to remedy this.

A = Aerate F = Fertilize S = Seed W = Weed Control

	SITE LOCATION	Jul-09 TURF DENSITY	Jul-09 WEED POPULATION	Jul-09 APPEARANCE	Action Threshold	Rating	Recommendations
	MEMORIAL BUILDING						
HV	NORTH	4	3	3	3.2	3.33	A,F
HV	SOUTH	4	3	4	3.2	3.67	A,F
HV	BURLINGTON PARK	2	3	3	3.2	2.67	A,F,S
P	SYMONDS DRIVE	2	3	3	2.4	2.67	A,F,S
HV	POLICE/FIRE BLDG	3	2	3	2.8	2.67	A,F,W
	WATER PLANT						
HV	WEST OF PLANT	3	3	3	2.8	3.00	A,F
P	S ALONG SYMONDS	3	2	3	2.4	2.67	A,F,W
PF	RESERVOIR	3	3	3	2.8	3.00	A,F
P	PUB WORKS GARAGE	2	2	2	2.4	2.00	A,F,S,W
P	BRUSH HILL	2	2	2	2.4	2.00	A,F,S,W
	PEIRCE PARK						
A	FAR EAST FIELDS	4	3	4	2.8	3.67	A,F
A	NEAR EAST FIELDS	3	3	3	2.8	3.00	A,F
PF	PASSIVE AREAS	2	3	3	2.8	2.67	A,F,S
A	WEST FIELD	4	3	3	2.8	3.33	A,F
P	RAVINE & CTY LINE	3	3	3	2.4	3.00	A,F
P	RAVINE & OAK	3	3	3	2.4	3.00	A,F
P	YORK & WALKER	2	1	1	2.4	1.33	A,F,S,W
P	MADISON @ OGDEN	1	1	1	2.4	1.00	A,F,S,W
	BURNS FIELD						
A	ICE RINK	2	1	2	2.8	1.67	A,F,S,W
A	SOCCER AREA	3	3	3	2.8	3.00	A,F
A	PLAYGROUND	3	2	3	2.8	2.67	A,F,W
PF	FRINGE	2	2	2	2.8	2.00	A,F,S,W
	STOUGH PARK						
A	ICE RINK	3	2	3	2.8	2.67	A,F,W
O	RAILROAD BANK	3	3	3	n/a	n/a	n/a
PF	EAST PASSIVE	3	3	3	2.8	3.00	A,F
PF	CENTRAL PASSIVE	3	3	3	2.8	3.00	A,F
PF	W HINSDALE STA	2	1	1	2.8	1.33	A,F,S,W
P	JACKSON: 4TH - 8TH	2	1	2	2.4	1.67	A,F,S,W
P	JACKSON PRAIRIE	5	3	5	2.4	4.33	S
A	MELIN PARK	3	2	3	2.8	2.67	A
A	DIETZ PARK	2	3	3	2.8	2.67	A,F,S

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A = Aerate F = Fertilize S = Seed W = Weed Control

	SITE LOCATION	Jul-09 TURF DENSITY	Jul-09 WEED POPULATION	Jul-09 APPEARANCE	Action Threshold	Rating	Recommendations
	ROBBINS PARK						
A	NE - NORTH	3	3	3	2.8	3.00	A,F
A	NE - SOUTH	3	3	3	2.8	3.00	A,F
A	CENTRAL	3	3	3	2.8	3.00	A,F
A	SOUTHWEST	3	3	3	2.8	3.00	A,F
PF	PARKWAYS	3	3	3	2.8	3.00	A,F
A	FOOTBALL	3	2	3	2.8	2.67	A,F,W
	SWIMMING POOL						
PF	NORTH	1	2	2	2.8	1.67	A,F,S,W
PF	SOUTH	3	2	3	2.8	2.67	A,F,W
A	WEST	3	3	3	2.8	3.00	A,F
PF	EHRET PARK	2	3	3	2.8	2.67	A,F,S
P	HINS: STOUGH - GARF	1	1	2	2.4	1.33	A,F,S,W
HV	ELEANOR'S PARK	5	3	4	3.2	4.00	A,F
P	CHICAGO @ BNRR	3	3	3	2.4	3.00	A,F
	HIGHLAND PARK						
PF	PASSIVE	3	3	3	2.8	3.00	A,F
PF	PARKWAYS	2	1	2	2.8	1.67	A,F,S,W
A	VEECK PARK	2	3	2	2.8	2.33	A,F,S
P	CHICAGO @ PRINCE	3	3	3	2.4	3.00	A,F
P	1ST & PRINCETON	3	3	3	2.4	3.00	A,F
P	3RD & PRINCETON	3	3	3	2.4	3.00	A,F
P	COLUMBIA: 1ST - 3RD	3	2	3	2.4	2.67	A,F,W
	BROOK PARK						
A	PLAYING FIELD	3	2	3	2.8	2.67	A,F,W
PF	FRINGE AREAS	2	2	2	2.8	2.00	A,F,S,W
PF	6TH & PRINCETON	4	3	3	2.8	3.33	A,F
P	7TH & HARDING	3	3	3	2.4	3.00	A,F
PF	WOODLAND PARK	3	3	3	2.8	3.00	A,F
O	TAFT @ 55TH	1	1	1	n/a	n/a	n/a
P	7TH & WILSON	2	3	2	2.4	2.33	A,F,S
O	CLEVELAND @ 55TH	1	1	1	n/a	n/a	n/a
PF	WOODLAND DR ISLES	3	3	3	2.8	3.00	A,F
P	DALEWOOD ISLAND	3	3	3	2.4	3.00	A,F,W
P	COUNTY LINE CT	2	1	2	2.4	1.67	A,F,S,W
O	PAMELA CIRCLE	1	1	1	n/a	n/a	n/a
PF	CHARLESTON RD	3	3	3	2.8	3.00	A,F

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	SITE LOCATION	Jul-09 TURF DENSITY	Jul-09 WEED POPULATION	Jul-09 APPEARANCE	Action Threshold	Rating	Recommendations
	KLM PARK						
HV	NEAR BUILDINGS	2	2	2	3.2	2.00	A,F,S,W
HV	CONCERT HILL	4	2	3	3.2	3.00	A,F,W
A	NORTH OF CREEK	2	1	2	2.8	1.67	A,F,S,W
A	EAST PLAY AREA	3	2	3	2.8	2.67	A,F,W
PF	SOUTH OF ROAD	2	2	2	2.8	2.00	A,F,S,W
PF	4TH ST ISLANDS	3	3	3	2.8	3.00	A,F
P	OAK @ 9TH	2	2	1	n/a	n/a	n/a
P	ELM ; 9TH - 55TH	3	2	3	2.4	2.67	A,F
PF	WASHINGTON CIRC	3	3	3	2.8	3.00	A,F
O	WASHINGTON LOT	1	1	1	n/a	n/a	n/a
PF	PARKWAYS @ HMS	2	1	1	2.8	1.33	A,F,S,W
O	LINCOLN LOT	1	1	1	n/a	n/a	n/a
O	VILLAGE LOT	1	1	1	n/a	n/a	n/a
O	W OF POST CIRCLE	1	1	1	n/a	n/a	n/a
A	DUNCAN FIELD	2	2	2	2.8	2.00	A,F,S,W

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	SITE LOCATION	Nov-09 TURF DENSITY	Nov-09 WEED POPULATION	Nov-09 APPEARANCE	Action Threshold	Rating	Recommendations
	MEMORIAL BUILDING						
HV	NORTH	4	3	3	3.2	3.33	A,F
HV	SOUTH	4	3	4	3.2	3.67	A,F
HV	BURLINGTON PARK	3	3	3	3.2	3.00	A,F
P	SYMONDS DRIVE	2	3	3	2.4	2.67	A,F,S
HV	POLICE/FIRE BLDG	3	3	3	2.8	3.00	A,F
	WATER PLANT						
HV	WEST OF PLANT	3	3	3	2.8	3.00	A,F
P	S ALONG SYMONDS	3	2	3	2.4	2.67	A,F,W
PF	RESERVOIR	3	3	3	2.8	3.00	A,F
P	PUB WORKS GARAGE	2	2	2	2.4	2.00	A,F,S,W
P	BRUSH HILL	3	3	3	2.4	3.00	A,F
	PEIRCE PARK						
A	FAR EAST FIELDS	4	3	4	2.8	3.67	A,F
A	NEAR EAST FIELDS	3	3	3	2.8	3.00	A,F
PF	PASSIVE AREAS	2	3	3	2.8	2.67	A,F,S
A	WEST FIELD	4	3	3	2.8	3.33	A,F
P	RAVINE & CTY LINE	3	3	3	2.4	3.00	A,F
P	RAVINE & OAK	3	3	3	2.4	3.00	A,F
P	YORK & WALKER	2	1	1	2.4	1.33	A,F,S,W
P	MADISON @ OGDEN	1	1	1	2.4	1.00	A,F,S,W
	BURNS FIELD						
A	ICE RINK	2	1	2	2.8	1.67	A,F,S,W
A	SOCCER AREA	3	3	3	2.8	3.00	A,F
A	PLAYGROUND	3	2	3	2.8	2.67	A,F,W
PF	FRINGE	2	2	2	2.8	2.00	A,F,S,W
	STOUGH PARK						
A	ICE RINK	3	3	3	2.8	3.00	A,F
O	RAILROAD BANK	3	3	3	n/a	n/a	n/a
PF	EAST PASSIVE	3	3	3	2.8	3.00	A,F
PF	CENTRAL PASSIVE	3	3	3	2.8	3.00	A,F
PF	W HINSDALE STA	2	1	1	2.8	1.33	A,F,S,W
P	JACKSON: 4TH - 6TH	2	3	3	2.4	2.67	A,F,S
P	JACKSON PRAIRIE	5	3	5	2.4	4.33	S
A	MELIN PARK	3	2	3	2.8	2.67	A
A	DIETZ PARK	3	3	3	2.8	3.00	A,F

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	SITE LOCATION	Nov-09 TURF DENSITY	Nov-09 WEED POPULATION	Nov-09 APPEARANCE	Action Threshold	Rating	Recommendations
	ROBBINS PARK						
A	NE - NORTH	3	3	3	2.8	3.00	A,F
A	NE - SOUTH	3	3	3	2.8	3.00	A,F
A	CENTRAL	3	3	3	2.8	3.00	A,F
A	SOUTHWEST	3	3	3	2.8	3.00	A,F
PF	PARKWAYS	3	3	3	2.8	3.00	A,F
A	FOOTBALL	4	3	4	2.8	3.67	A,F
	SWIMMING POOL						
PF	NORTH	1	2	2	2.8	1.67	A,F,S,W
PF	SOUTH	3	2	3	2.8	2.67	A,F,W
A	WEST	3	3	3	2.8	3.00	A,F
PF	EHRET PARK	3	3	3	2.8	3.00	A,F
P	HINS: STOUGH - GARF	1	1	2	2.4	1.33	A,F,S,W
HV	ELEANOR'S PARK	5	3	4	3.2	4.00	A,F
P	CHICAGO @ BNRR	3	3	3	2.4	3.00	A,F
	HIGHLAND PARK						
PF	PASSIVE	3	3	3	2.8	3.00	A,F
PF	PARKWAYS	2	1	2	2.8	1.67	A,F,S,W
A	VEECK PARK	2	3	2	2.8	2.33	A,F,S
P	CHICAGO @ PRINCE	3	3	3	2.4	3.00	A,F
P	1ST & PRINCETON	3	3	3	2.4	3.00	A,F
P	3RD & PRINCETON	3	3	3	2.4	3.00	A,F
P	COLUMBIA: 1ST - 3RD	3	2	3	2.4	2.67	A,F,W
	BROOK PARK						
A	PLAYING FIELD	3	3	3	2.8	3.00	A,F
PF	FRINGE AREAS	2	3	2	2.8	2.33	A,F,S
PF	6TH & PRINCETON	4	3	3	2.8	3.33	A,F
P	7TH & HARDING	3	3	3	2.4	3.00	A,F
PF	WOODLAND PARK	3	3	3	2.8	3.00	A,F
O	TAFT @ 55TH	1	1	1	n/a	n/a	n/a
P	7TH & WILSON	2	3	2	2.4	2.33	A,F,S
O	CLEVELAND @ 55TH	1	1	1	n/a	n/a	n/a
PF	WOODLAND DR ISLES	3	3	3	2.8	3.00	A,F
P	DALEWOOD ISLAND	3	3	3	2.4	3.00	A,F,W
P	COUNTY LINE CT	2	1	2	2.4	1.67	A,F,S,W
O	PAMELA CIRCLE	1	1	1	n/a	n/a	n/a
PF	CHARLESTON RD	3	3	3	2.8	3.00	A,F

= Area has a rating that falls below the Action Threshold. Action should be taken to remedy this.

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	SITE LOCATION	Nov-09 TURF DENSITY	Nov-09 WEED POPULATION	Nov-09 APPEARANCE	Action Threshold	Rating	Recommendations
	KLM PARK						
HV	NEAR BUILDINGS	3	3	3	3.2	3.00	A,F,S
HV	CONCERT HILL	4	3	3	3.2	3.33	A,F
A	NORTH OF CREEK	2	3	3	2.8	2.67	A,F,S
A	EAST PLAY AREA	3	3	3	2.8	3.00	A,F
PF	SOUTH OF ROAD	2	3	2	2.8	2.33	A,F,S
PF	4TH ST ISLANDS	3	3	3	2.8	3.00	A,F
P	OAK @ 9TH	2	2	1	n/a	n/a	n/a
P	ELM ; 9TH - 55TH	3	2	3	2.4	2.67	A,F
PF	WASHINGTON CIRC	3	3	3	2.8	3.00	A,F
O	WASHINGTON LOT	1	1	1	n/a	n/a	n/a
PF	PARKWAYS @ HMS	2	1	1	2.8	1.33	A,F,S,W
O	LINCOLN LOT	1	1	1	n/a	n/a	n/a
O	VILLAGE LOT	1	1	1	n/a	n/a	n/a
O	W OF POST CIRCLE	1	1	1	n/a	n/a	n/a
A	DUNCAN FIELD	2	2	2	2.8	2.00	A,F,S,W

= Area has a rating that falls below the Action Threshold. Action should be taken to remedy this.

A = Aerate F = Fertilize S = Seed W = Weed Control

GROUNDS MAINT HISTORY	SPR 2000	FALL 2000	SPR 2001	FALL 2001	SPR 2002	FALL 2002	SPR 2003	FALL 2003	SPR 2004	FALL 2004	SPR 2005	FALL 2005	SPR 2006	FALL 2006	SPR 2007	FALL 2007	SPR 2008	FALL 2008	SPR 2009	FALL 2009
1 MEMORIAL BUILDING																				
NORTH	AF	AWS	AF	AF	F	AF	AF	AFWS	AF	F	AF	AF	AF	AF	S	AF	WA	FAS	AFW	AF
SOUTH	AF	AF	AF	AFWS	F	AF	AF	AF	AF	FWS	AF	AF	AF	AF		AF	WA	FAS	AFWO	AFO
2 BURLINGTON PARK	AF	AF	AF	AF	F	AF	AF	const	const	AF	AF	WAFS	AO	AF		AF	WA	FAS	AFW	AF
3 SYMONDS DRIVE	F	AFWS	F	FWS	F	F	F	F	F	F	F	WF	F	WSF				F	FW	F
4 POLICE/FIRE BLDG	F	AFWS	F	FWS	F	F	F	FW	F	F	F		F	F		F	A	WFS	AF	AFW
5 WATER PLANT																				
WEST OF PLANT	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F		WAF	AF	AF
S ALONG SYMONDS	F	F	F	F	F	F	F	F	F	F	F	F	F	F				WF	AF	AF
N OVER RESERVOIR	F	F	F	F	F	F	F	F	F	FWS	F	F	F	F		F	A	WAF	AF	AFS
6 PW GARAGE	F	F	F	F	F	F	F	F	F	F	F	WFS	F	WSF		F		WF	F	F
7 BRUSH HILL	F	AF	F	WFS	F	F	F	F	F	F	F	F	F	F		F	A	WAFS	AF	AFW
8 PEIRCE PARK																				
FAR EAST - N	AF	AF	F	AF	F	AF	AF	WSF	F	FWS	AF	AF	AF	AF	A	AF		A	F	F
NEAR EAST - N	AF	AF	F	AF	F	AF	AF	WSF	F	FWS	AF	AF	AF	AF	A	AF		A	F	F
FAR EAST - S	AO	AO	O	AO	F	AF	AF	WSF	F	F	AF	AF	AO	AO	A	F		A	F	F
NEAR EAST - S	AO	AO	O	AO	F	AF	AF	WSF	F	F	AF	AF	AO	AO	A	AF		A	F	F
PASSIVE AREAS	AF	AF	F	F	F	FWS	F	F	F	F	AF	F	F	F		F	A	WA	F	AFS
WEST FIELD	AF	F	F	F	F	FAWS	AF	F	F	F	AF	AF	AF	AF	A	F		A	F	F
9 RAVINE & CTY LINE	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F		F	FW	F
10 RAVINE & OAK	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F		F	FW	F
11 YORK & WALKER	F	F	F	F	F	F	F	F	F	F	F	F	O	F		F				
12 MADISON @ OGDEN	F		F	F	F		F				F		F			F				
13 BURNS FIELD																				
ICE RINK		A	AF	A					S		A						W	FA	AF	AF
SOCCER AREA	AF	AF	AF	AF	F	--	AF	F	F	FWS	AF	WAFS	AF	WASF	S	AFS	W	FA	AF	AF
PLAYGROUND	AF	AF	AF	AF	F	--	F	WS	F	F	AF	F	F	F		F		A	AF	AF
FRINGE	AF	AF	AF	WFS	F	WFS	F	WSF	F	FWS	F	WFS	F	WSF		F	W	A	AF	AF
14 STOUGH PARK																				
ICE RINK	A	A	A								AF		F		S	AFS	A	WAF	AF	AF
RAILROAD BANK		AF				WS	F	WSF	F	FWS	AF	F	F	F		F	A	WAF	AF	AF
EAST PASSIVE	AF	AF	AF		F	F	F	F	F	F	AF	FWS	F	WSF		F	A	WAF	AF	AF
CENTRAL PASSIVE	AF	AF	F	F	F	FW	F	F	F	F	AF	F	F	ASF		F	A	WAF	AF	AF
15 W HINSDALE STA	O	WS	F	F	F	F	F	F	F	F	F	FS	F	WSF						

A = AERATE/F = FERTILIZE/O = ORG NAT FERT/S = SEED STARTER FERT/W = WEED CONTROL

GROUNDS MAINT HISTORY	SPR 2000	FALL 2000	SPR 2001	FALL 2001	SPR 2002	FALL 2002	SPR 2003	FALL 2003	SPR 2004	FALL 2004	SPR 2005	FALL 2005	SPR 2006	FALL 2006	SPR 2007	FALL 2007	SPR 2008	FALL 2008	SPR 2009	FALL 2009
16 JACKSON: 4TH - 5TH	O	O	O	O	F	O	F	F	F	F	F	F	F	F		F		F	F	AFWS
17 JACKSON PRAIRIE	F	F	F	F	F	F	F	F	F	FWS	F	F	O	O	S		S			
18 MELIN PARK	AF	AF	AF	AF	F	AF	AF	AFSW	F	F	F	F	AF	F	S	AFS	AO	AO	AOS	AOS
19 DIETZ PARK	AF	AF	AF	AWFS	F	AF	AF	AFSW	F	F	F	F	AF	WFS		AFS		AF	AF	AFWS
20 ROBBINS PARK																				
NE - NORTH	AF	AF	F	AF	F	AF	F	const	F	WS	AF	AF	AF	AF	AS	AFS	WA	WAF	AFW	AFS
NE - SOUTH	AF	AF	F	AF	F	AF	F	const	F	WS	AF	AF	AF	AF	AS	AFS	WA	WAF	AFW	AFS
CENTRAL	AF	AF	F	AF	F	AF	F	F	AF	FW	AFS	FS	F	WFS	AS	AFS	WA	WAFS	AFWS	AFWS
SOUTHWEST	AF	AF	F	F	F	AF	AF	A	F	FWS	AF	AF	F	AF	S	AFS	WA	WAF	AFW	AFS
PARKWAYS	F	F	F	F	F	AF	F	WS	FS	F	AF	F	F	F		F	WA	WAF	AFW	AFS
21 SWIMMING POOL																				
NORTH	F	WSF	AF	F	F	F	F	F	F	FWS	F	F	F	F		F		WAF	F	F
SOUTH	F	F	AF	F	F	F	F	FW	F	F	F	F	F	F		F		WF	F	F
WEST	AF	AF	AF	F	F	FWS	F	FW	F	FWS	F	F	F	F		F		WF	F	AF
22 EHRET PARK	F	AF	F	F	F	F	F	F	F	F	F	F	F	F		F	WA	F	AF	AFS
23 HINS: STOUGH-GARF	F	FS	F	F		F	F	F	F	F	F	WFS	F	F						
24 ELEANOR'S PARK	F	F	F	F	F	F	F	FW	F	F	F	F	F	F		F		A	F	F
25 CHICAGO @ BNRR		WS				FWS		FWS		F	F	F	F	F					F	F
26 HIGHLAND PARK																				
PASSIVE	AF	AF	F	F	F	FWS	F	F	F	F	F	F	F	F		F	WA	WAF	AF	AFS
PARKWAYS	F	AF	F	F	F	FWS	F	F	F	F	F	F	F	F		F	WA	WAF	AF	AFWS
27 VEECK PARK			A	AF	A	AWF	AF	ASF	AF	AF	ASF	AF	AF	AWSF	AS	AFS	A	WAFS	AF	AFS
28 CHIC@ PRINCETON	F	F		F	F	F	F	F	F	F	F	F	F	AF		F	W	A	F	F
29 1ST & PRINCETON	F	WS	F	F	F	F	F	FW	F	F	F	F	F	F		F	W	A	F	F
30 3RD & PRINCETON	F	WS	F	F	F	F	F	F	F	FWS	F	F	F	F		F	W		F	F
31 COLUMBIA: 1ST-3RD		F		F		F		F		F	F	F	F	F		F		F	F	F

A = AERATE/F = FERTILIZE/O = ORG NAT FERT/S = SEED STARTER FERT/W = WEED CONTROL

GROUNDS MAINT HISTORY	SPR 2000	FALL 2000	SPR 2001	FALL 2001	SPR 2002	FALL 2002	SPR 2003	FALL 2003	SPR 2004	FALL 2004	SPR 2005	FALL 2005	SPR 2006	FALL 2006	SPR 2007	FALL 2007	SPR 2008	FALL 2008	SPR 2009	FALL 2009
32 BROOK PARK																				
PLAYING FIELD	AF	F	AF	AF	F	AF	AF	AF	AF	AF	AF	F	F	F		AF		AFS	AFWS	AFWS
FRINGE AREAS	AF	F	AF	AF	F	AF	AF	AF	AF	AF	F	FWS	F	F		F		AFS	AFW	AFW
33 6TH & PRINCETON	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F	W	A	F	F
34 7TH & HARDING	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F		F	F	F
35 WOODLAND PARK	AF	F	AF	F	F	F	F	F	F	F	F	FWS	F	WSF		F			FW	F
36 TAFT @ 56TH		F				F		F		F		F		F						
37 7TH & WILSON		F				F		F		F		F		F		F		F	F	F
38 CLEVELAND @ 55TH	F	F	F	F	F	F	F	FW	F	F		F		F						
39 WOODLAND DR ISLE	F	F	F	F	F	F	F	F	F	F	F	FWS	F	F		F	W	AF	F	F
40 DALEWOOD ISLAND		F	F	F	F	F	F	F	F	F	F	F	F	F				F	F	F
41 COUNTY LINE CT	F		F	F	F	F	F		F									F		
42 PAMELA CIRCLE																				
43 CHARLESTON RD	F	F	F	F	F	F	F	AF	F	F	F	F	F	WF		F	S	AF	AFW	AF
44 KLM PARK																				
NEAR BUILDINGS	F	WSF	F	F	F	FS	F	FWS	F	FWS	F	WFS	F	AWSF		F	W	AF	AF	AFWS
CONCERT HILL	F	F	F	F	F	FS	F	FSW	AF	AF	AF	AF	F	AF	AS	F	W	AF	AF	AFW
NORTH OF CREEK	F	F	AF	AWF	F	FS	F	F	F	AWF	AF	F	AF	F		F	W	AF	AF	AFW
EAST PLAY AREA	F	F	AF	AF	F	AFS	AF	AFSW	AF	F	AF	AF	AF	AWF	AS	AFS	W	AF	AF	AFWS
SOUTH OF ROAD	F	F	F	F	F	FS	F	F	F	WF	AF	F	F	F		F	W	AF	AFO	AFO
45 4TH ST ISLANDS	F	F	F	F	F	F	F	F	F	F	F	F	F	F		F		WAF	F	F
46 OAK @ 9TH																				
47 ELM ; 9TH - 55TH	F		F	F	F				F											
48 WASHINGTON CIRCLE	F	F	F	F	F	F	F	FW	F	F	F	F	F	F		F	A	WAF	F	F
49 WASHINGTON LOT	F		F	F	F	F	F	const	F											
50 PARKWAYS @ HMS	F		F	F	F	F	F	const	F							F				
51 LINCOLN LOT	F		F	F	F	F	F	const	F											
52 VILLAGE LOT	F		F	F	F	F	F	const	F			WS								
53 W OF POST CIRCLE	F		F	F	F	W	F		F					F						
54 DUNCAN FIELD																F			A	A

A = AERATE/F = FERTILIZE/O = ORG NAT FERT/S = SEED STARTER FERT/W = WEED CONTROL

ACRES OF ACTIVITY SPRING 2009

LOCATION	AREA SF	AREA AC	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE
1 MEMORIAL BUILDING														
NORTH	35,200	0.81	X	0	X	0	0	X	0.81	0.00	0.81	0.00	0.00	0.81
SOUTH	62,500	1.43	X	X	X	X	0	X	1.43	1.43	1.43	1.43	0.00	1.43
2 BURLINGTON PARK	62,400	1.43	X	0	X	0	0	X	1.43	0.00	1.43	0.00	0.00	1.43
3 SYMONDS DRIVE	18,400	0.42	X	0	X	0	0	0	0.42	0.00	0.42	0.00	0.00	0.00
4 POLICE/FIRE BUILDING	5,200	0.12	X	0	0	0	0	X	0.12	0.00	0.00	0.00	0.00	0.12
5 WATER PLANT														
WEST OF PLANT	20,000	0.46	X	0	0	0	0	X	0.46	0.00	0.00	0.00	0.00	0.46
SOUTH ALONG SYMONDS	4,500	0.10	X	0	0	0	0	X	0.10	0.00	0.00	0.00	0.00	0.10
NORTH OVER RESERVOIR	64,400	1.48	X	0	0	0	0	X	1.48	0.00	0.00	0.00	0.00	1.48
6 PUBLIC WORKS GARAGE	5,200	0.12	X	0	0	0	0	0	0.12	0.00	0.00	0.00	0.00	0.00
7 BRUSH HILL	119,400	2.74	X	0	0	0	0	X	2.74	0.00	0.00	0.00	0.00	2.74
8 PEIRCE PARK														
FAR EAST FIELDS	49,050	1.13	X	0	0	0	0	0	1.13	0.00	0.00	0.00	0.00	0.00
NEAR EAST FIELDS	49,050	1.13	X	0	0	0	0	0	1.13	0.00	0.00	0.00	0.00	0.00
PASSIVE AREAS	173,200	3.98	X	0	0	0	0	0	3.98	0.00	0.00	0.00	0.00	0.00
WEST FIELD	62,500	1.43	X	0	0	0	0	0	1.43	0.00	0.00	0.00	0.00	0.00
9 RAVINE & COUNTY LINE	900	0.02	X	0	X	0	0	0	0.02	0.00	0.02	0.00	0.00	0.00
10 RAVINE & OAK	3,000	0.07	X	0	X	0	0	0	0.07	0.00	0.07	0.00	0.00	0.00
11 YORK & WALKER	4,000	0.09	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
12 MADISON @ OGDEN	9,950	0.23	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
13 BURNS FIELD														
ICE RINK	73,500	1.69	X	0	0	0	0	X	1.69	0.00	0.00	0.00	0.00	1.69
SOCCER AREA	37,500	0.86	X	0	0	0	0	X	0.86	0.00	0.00	0.00	0.00	0.86
PLAYGROUND	8,000	0.18	X	0	0	0	0	X	0.18	0.00	0.00	0.00	0.00	0.18
FRINGE	117,600	2.70	X	0	0	0	0	X	2.70	0.00	0.00	0.00	0.00	2.70
14 STOUGH PARK														
ICE RINK	22,800	0.52	X	0	0	0	0	X	0.52	0.00	0.00	0.00	0.00	0.52
RAILROAD BANK	38,400	0.88	X	0	0	0	0	X	0.88	0.00	0.00	0.00	0.00	0.88
EAST PASSIVE	18,700	0.43	X	0	0	0	0	X	0.43	0.00	0.00	0.00	0.00	0.43
CENTRAL PASSIVE	34,400	0.79	X	0	0	0	0	X	0.79	0.00	0.00	0.00	0.00	0.79
15 WEST HINSDALE STATION	8,950	0.21	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00

LOCATION	AREA SF	AREA AC	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE
16 JACKSON: 4TH - 8TH	228,900	5.25	X	0	0	0	0	0	5.25	0.00	0.00	0.00	0.00	0.00
17 JACKSON PRAIRIE	21,780	0.50	0	0	0	0	X	0	0.00	0.00	0.00	0.00	0.50	0.00
18 MELIN PARK	97,300	2.23	0	X	0	X	X	X	0.00	2.23	0.00	2.23	2.23	2.23
19 DIETZ PARK	54,200	1.24	X	0	0	0	0	X	1.24	0.00	0.00	0.00	0.00	1.24
20 ROBBINS PARK	591,700	13.58												
TOTAL	591,700	13.58	X	0	X	0	X	X	13.58	0.00	13.58	0.00	13.58	13.58
NORTHEAST - NORTH	"		X	0	X	0	0	X	0.00	0.00	0.00	0.00	0.00	0.00
NORTHEAST - SOUTH	"		X	0	X	0	0	X	0.00	0.00	0.00	0.00	0.00	0.00
CENTRAL	"	1.24	X	0	X	0	0	X	1.24	0.00	1.24	0.00	0.00	1.24
SOUTHWEST	"		X	0	X	0	0	X	0.00	0.00	0.00	0.00	0.00	0.00
PARKWAYS	"	0.52	X	0	X	0	0	X	0.52	0.00	0.52	0.00	0.00	0.52
FOOTBALL	54,000	1.24	X	0	X	0	X	X	1.24	0.00	1.24	0.00	1.24	1.24
21 SWIMMING POOL														
NORTH	8,700	0.20	X	0	0	0	0	0	0.20	0.00	0.00	0.00	0.00	0.00
SOUTH	8,700	0.20	X	0	0	0	0	0	0.20	0.00	0.00	0.00	0.00	0.00
WEST	23,100	0.53	X	0	0	0	0	0	0.53	0.00	0.00	0.00	0.00	0.00
22 EHRET PARK	24,500	0.56	X	0	0	0	0	X	0.56	0.00	0.00	0.00	0.00	0.56
23 HINSDALE: STOUGH - GARF	78,500	1.80	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
@VINE ST, QUINCY ST														
24 ELEANOR'S PARK	18,200	0.42	X	0	0	0	0	X	0.42	0.00	0.00	0.00	0.00	0.42
25 CHICAGO @ BNRR	18,700	0.43	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
26 HIGHLAND PARK														
PASSIVE	195,000	4.48	X	0	0	0	0	X	4.48	0.00	0.00	0.00	0.00	4.48
PARKWAYS	"	0.00	X	0	0	0	0	X	0.00	0.00	0.00	0.00	0.00	0.00
27 VEECK PARK	522,720	12.00	X	0	0	0	0	X	12.00	0.00	0.00	0.00	0.00	12.00
28 CHICAGO @ PRINCETON	17,200	0.39	X	0	0	0	0	0	0.39	0.00	0.00	0.00	0.00	0.00
29 1ST & PRINCETON	15,500	0.36	X	0	0	0	0	0	0.36	0.00	0.00	0.00	0.00	0.00
30 3RD & PRINCETON	18,400	0.42	X	0	0	0	0	0	0.42	0.00	0.00	0.00	0.00	0.00
31 COLUMBIA: 1ST - 3RD	10,200	0.23	X	0	0	0	0	0	0.23	0.00	0.00	0.00	0.00	0.00
32 BROOK PARK														
PLAYING FIELD	236,800	5.44	X	0	X	0	X	X	5.44	0.00	5.44	0.00	5.44	5.44
FRINGE AREAS(near tennis)	"	0.00	X	0	X	0	0	X	0.00	0.00	0.00	0.00	0.00	0.00
33 6TH & PRINCETON	2,700	0.06	X	0	0	0	0	0	0.06	0.00	0.00	0.00	0.00	0.00
34 7TH & HARDING	8,800	0.20	X	0	0	0	0	0	0.20	0.00	0.00	0.00	0.00	0.00
35 WOODLAND PARK	198,000	4.55	X	0	X	0	0	0	4.55	0.00	4.55	0.00	0.00	0.00
36 TAFT @ 55TH	30,600	0.70	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
37 7TH & WILSON	800	0.02	X	0	0	0	0	0	0.02	0.00	0.00	0.00	0.00	0.00
38 CLEVELAND @ 55TH	7,900	0.18	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
39 WOODLAND ISLANDS	35,700	0.82	X	0	0	0	0	0	0.82	0.00	0.00	0.00	0.00	0.00
40 DALEWOOD ISLAND	4,000	0.09	X	0	0	0	0	0	0.09	0.00	0.00	0.00	0.00	0.00

LOCATION	AREA SF	AREA AC	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE
41 COUNTY LINE CT	900	0.02	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
42 PAMELA CIRCLE	500	0.01	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
43 CHARLESTON RD	48,900	1.12	X	0	X	0	0	X	1.12	0.00	1.12	0.00	0.00	1.12
44 KLM PARK														
NEAR BLDGS (west & pkwy)	250,000	5.74	X	0	0	0	0	X	5.74	0.00	0.00	0.00	0.00	5.74
CONCERT HILL	1,662,000	4.67	X	0	0	0	0	X	4.67	0.00	0.00	0.00	0.00	4.67
NORTH OF CREEK	"	33.48	X	0	0	0	0	X	33.48	0.00	0.00	0.00	0.00	33.48
EAST PLAY AREA	203,500	4.67	X	0	0	0	0	X	4.67	0.00	0.00	0.00	0.00	4.67
SOUTH OF ROAD	"	incl	X	X	0	X	0	X	incl	incl	0.00	incl	0.00	incl
45 4TH ST ISLANDS	55,000	1.26	X	0	0	0	0	0	1.26	0.00	0.00	0.00	0.00	0.00
46 OAK @ 9TH	3,400	0.08	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
47 ELM ; 9TH - 55TH	15,450	0.35	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
48 WASHINGTON CIRCLE	20,200	0.46	X	0	0	0	0	X	0.46	0.00	0.00	0.00	0.00	0.46
49 WASHINGTON LOT	1,150	0.03	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
50 PARKWAYS @ HMS	3,200	0.07	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
51 LINCOLN LOT	2,800	0.06	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
52 VILLAGE LOT	7,450	0.17	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
53 WEST OF POST CIRCLE	6,000	0.14	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
54 DUNCAN FIELD	73,500	1.69	0	0	0	0	0	X	0.00	0.00	0.00	0.00	0.00	1.69
TOTAL	6,586,950	151.22					ACREAGE		130.36	3.66	31.87	3.66	22.99	111.40

ACRES OF ACTIVITY FALL 2009

LOCATION	AREA SF	AREA AC	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE
1 MEMORIAL BUILDING														
NORTH	35,200	0.81	X	0	0	0	0	X	0.81	0.00	0.00	0.00	0.00	0.81
SOUTH	62,500	1.43	X	X	0	X	0	X	1.43	1.43	0.00	1.43	0.00	1.43
2 BURLINGTON PARK	62,400	1.43	X	0	0	0	0	X	1.43	0.00	0.00	0.00	0.00	1.43
3 SYMONDS DRIVE	18,400	0.42	X	0	0	0	0	0	0.42	0.00	0.00	0.00	0.00	0.00
4 POLICE/FIRE BUILDING	5,200	0.12	X	0	X	0	0	X	0.12	0.00	0.12	0.00	0.00	0.12
5 WATER PLANT														
WEST OF PLANT	20,000	0.46	X	0	0	0	0	X	0.46	0.00	0.00	0.00	0.00	0.46
SOUTH ALONG SYMONDS	4,500	0.10	X	0	0	0	0	X	0.10	0.00	0.00	0.00	0.00	0.10
NORTH OVER RESERVOIR	64,400	1.48	X	0	0	0	X	X	1.48	0.00	0.00	0.00	1.48	1.48
6 PUBLIC WORKS GARAGE	5,200	0.12	X	0	0	0	0	0	0.12	0.00	0.00	0.00	0.00	0.00
7 BRUSH HILL	119,400	2.74	X	0	X	0	0	X	2.74	0.00	2.74	0.00	0.00	2.74
8 PEIRCE PARK														
FAR EAST FIELDS	49,050	1.13	X	0	0	0	0	0	1.13	0.00	0.00	0.00	0.00	0.00
NEAR EAST FIELDS	49,050	1.13	X	0	0	0	0	0	1.13	0.00	0.00	0.00	0.00	0.00
PASSIVE AREAS	173,200	3.98	X	0	0	0	X	0	3.98	0.00	0.00	0.00	3.98	0.00
WEST FIELD	62,500	1.43	X	0	0	0	0	0	1.43	0.00	0.00	0.00	0.00	0.00
9 RAVINE & COUNTY LINE	900	0.02	X	0	0	0	0	0	0.02	0.00	0.00	0.00	0.00	0.00
10 RAVINE & OAK	3,000	0.07	X	0	0	0	0	0	0.07	0.00	0.00	0.00	0.00	0.00
11 YORK & WALKER	4,000	0.09	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
12 MADISON @ OGDEN	9,950	0.23	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
13 BURNS FIELD														
ICE RINK	73,500	1.69	X	0	0	0	0	X	1.69	0.00	0.00	0.00	0.00	1.69
SOCCER AREA	37,500	0.86	X	0	0	0	0	X	0.86	0.00	0.00	0.00	0.00	0.86
PLAYGROUND	8,000	0.18	X	0	0	0	0	X	0.18	0.00	0.00	0.00	0.00	0.18
FRINGE	117,600	2.70	X	0	0	0	0	X	2.70	0.00	0.00	0.00	0.00	2.70
14 STOUGH PARK														
ICE RINK	22,800	0.52	X	0	0	0	0	X	0.52	0.00	0.00	0.00	0.00	0.52
RAILROAD BANK	38,400	0.88	X	0	0	0	0	X	0.88	0.00	0.00	0.00	0.00	0.88
EAST PASSIVE	18,700	0.43	X	0	0	0	0	X	0.43	0.00	0.00	0.00	0.00	0.43
CENTRAL PASSIVE	34,400	0.79	X	0	0	0	0	X	0.79	0.00	0.00	0.00	0.00	0.79
15 WEST HINSDALE STATION	8,950	0.21	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00

LOCATION	AREA SF	AREA AC	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE
16 JACKSON: 4TH - 8TH	228,900	5.25	X	O	X	O	X	O	5.25	0.00	5.25	0.00	5.25	0.00
17 JACKSON PRAIRIE	21,780	0.50	O	O	O	O	O	O	0.00	0.00	0.00	0.00	0.00	0.00
18 MELIN PARK	97,300	2.23	O	X	O	X	X	X	0.00	2.23	0.00	2.23	2.23	2.23
19 DIETZ PARK	54,200	1.24	X	O	O	O	X	X	1.24	0.00	0.00	0.00	1.24	1.24
20 ROBBINS PARK	591,700	13.58												
TOTAL	591,700	13.58	X	O	O	O	X	X	13.58	0.00	0.00	0.00	13.58	13.58
NORTHEAST - NORTH	"		X	O	O	O	X	X	0.00	0.00	0.00	0.00	0.00	0.00
NORTHEAST - SOUTH	"		X	O	O	O	X	X	0.00	0.00	0.00	0.00	0.00	0.00
CENTRAL	"	1.24	X	O	O	O	X	X	1.24	0.00	0.00	0.00	1.24	1.24
SOUTHWEST	"		X	O	O	O	X	X	0.00	0.00	0.00	0.00	0.00	0.00
PARKWAYS	"	0.52	X	O	O	O	X	X	0.52	0.00	0.00	0.00	0.52	0.52
FOOTBALL	54,000	1.24	X	O	X	O	X	X	1.24	0.00	1.24	0.00	1.24	1.24
21 SWIMMING POOL														
NORTH	8,700	0.20	X	O	O	O	O	O	0.20	0.00	0.00	0.00	0.00	0.00
SOUTH	8,700	0.20	X	O	O	O	O	O	0.20	0.00	0.00	0.00	0.00	0.00
WEST	23,100	0.53	X	O	O	O	O	O	0.53	0.00	0.00	0.00	0.00	0.00
22 EHRET PARK	24,500	0.56	X	O	O	O	X	X	0.56	0.00	0.00	0.00	0.56	0.56
23 HINSDALE: STOUGH - GARF	78,500	1.80	O	O	O	O	O	O	0.00	0.00	0.00	0.00	0.00	0.00
@VINE ST, QUINCY ST														
24 ELEANOR'S PARK	18,200	0.42	X	O	O	O	O	X	0.42	0.00	0.00	0.00	0.00	0.42
25 CHICAGO @ BNRR	18,700	0.43	X	O	O	O	O	O	0.43	0.00	0.00	0.00	0.00	0.00
26 HIGHLAND PARK														
PASSIVE	195,000	4.48	X	O	O	O	X	X	4.48	0.00	0.00	0.00	4.48	4.48
PARKWAYS	"	0.00	X	O	X	O	X	X	0.00	0.00	0.00	0.00	0.00	0.00
27 VEECK PARK	522,720	12.00	X	O	O	O	X	X	12.00	0.00	0.00	0.00	12.00	12.00
28 CHICAGO @ PRINCETON	17,200	0.39	X	O	O	O	O	O	0.39	0.00	0.00	0.00	0.00	0.00
29 1ST & PRINCETON	15,500	0.36	X	O	O	O	O	O	0.36	0.00	0.00	0.00	0.00	0.00
30 3RD & PRINCETON	18,400	0.42	X	O	O	O	O	O	0.42	0.00	0.00	0.00	0.00	0.00
31 COLUMBIA: 1ST - 3RD	10,200	0.23	X	O	O	O	O	O	0.23	0.00	0.00	0.00	0.00	0.00
32 BROOK PARK														
PLAYING FIELD	236,800	5.44	X	O	X	O	X	X	5.44	0.00	5.44	0.00	5.44	5.44
FRINGE AREAS(near tennis)	"	0.00	X	O	X	O	O	X	0.00	0.00	0.00	0.00	0.00	0.00
33 6TH & PRINCETON	2,700	0.06	X	O	O	O	O	O	0.06	0.00	0.00	0.00	0.00	0.00
34 7TH & HARDING	8,800	0.20	X	O	O	O	O	O	0.20	0.00	0.00	0.00	0.00	0.00
35 WOODLAND PARK	198,000	4.55	X	O	O	O	O	O	4.55	0.00	0.00	0.00	0.00	0.00
36 TAFT @ 55TH	30,600	0.70	O	O	O	O	O	O	0.00	0.00	0.00	0.00	0.00	0.00
37 7TH & WILSON	800	0.02	X	O	O	O	O	O	0.02	0.00	0.00	0.00	0.00	0.00
38 CLEVELAND @ 55TH	7,900	0.18	O	O	O	O	O	O	0.00	0.00	0.00	0.00	0.00	0.00
39 WOODLAND ISLANDS	35,700	0.82	X	O	O	O	O	O	0.82	0.00	0.00	0.00	0.00	0.00
40 DALEWOOD ISLAND	4,000	0.09	X	O	O	O	O	O	0.09	0.00	0.00	0.00	0.00	0.00

LOCATION	AREA SF	AREA AC	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE	FERT	FERT ORG	WEED CHEM	WEED ORG	SPREAD SEED	AERATE
41 COUNTY LINE CT	900	0.02	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
42 PAMELA CIRCLE	500	0.01	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
43 CHARLESTON RD	48,900	1.12	X	0	0	0	0	X	1.12	0.00	0.00	0.00	0.00	1.12
44 KLM PARK														
NEAR BLDGS (west & pkwy)	250,000	5.74	X	0	X	0	X	X	5.74	0.00	5.74	0.00	5.74	5.74
CONCERT HILL	1,662,000	4.67	X	0	X	0	0	X	4.67	0.00	4.67	0.00	0.00	4.67
NORTH OF CREEK	"	33.48	X	0	X	0	0	X	33.48	0.00	33.48	0.00	0.00	33.48
EAST PLAY AREA	203,500	4.67	X	0	X	0	X	X	4.67	0.00	4.67	0.00	4.67	4.67
SOUTH OF ROAD	"	incl	X	X	X	X	0	X	incl	incl	incl	incl	0.00	incl
45 4TH ST ISLANDS	55,000	1.26	X	0	0	0	0	0	1.26	0.00	0.00	0.00	0.00	0.00
46 OAK @ 9TH	3,400	0.08	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
47 ELM ; 9TH - 55TH	15,450	0.35	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
48 WASHINGTON CIRCLE	20,200	0.46	X	0	0	0	0	X	0.46	0.00	0.00	0.00	0.00	0.46
49 WASHINGTON LOT	1,150	0.03	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
50 PARKWAYS @ HMS	3,200	0.07	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
51 LINCOLN LOT	2,800	0.06	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
52 VILLAGE LOT	7,450	0.17	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
53 WEST OF POST CIRCLE	6,000	0.14	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
54 DUNCAN FIELD	73,500	1.69	0	0	0	0	0	X	0.00	0.00	0.00	0.00	0.00	1.69
TOTAL	6,586,950	151.22					ACREAGE		130.79	3.66	63.35	3.66	63.65	111.40

ACRES OF ACTIVITY

	SPRING 2005	FALL 2005	SPRING 2006	FALL 2006	SPRING 2007	FALL 2007	SPRING 2008	FALL 2008	SPRING 2009	FALL 2009	TOTAL 2009	prev 3 yr avg
FERTILIZATION	126.7	133.1	126.7	131.3	0.0	132.7	0.0	114.3	130.4	130.8	261.2	168.3
WEED CONTROL	0.0	21.3	0.0	23.6	0.0	0.0	43.0	47.3	31.9	63.4	95.2	38.0
SEEDING & STARTER FERT	4.5	14.9	4.5	20.0	0.0	13.2	1.6	24.0	23.0	63.7	86.6	21.1
AERATE	90.5	30.8	30.4	41.1	45.7	38.0	50.9	119.8	111.4	111.4	222.8	108.7

Elm Tree Loss History

year	public loss	amputation	private loss	estimated start pop	end pop	% loss resid pop
1990	44	11	61	3,779	3,735	1.2%
1991	53	2	62	3,735	3,682	1.4%
1992	198	30	80	3,682	3,484	5.4%
1993	71	3	96	3,484	3,413	2.0%
1994	88	11	58	3,413	3,325	2.6%
1995	69	4	47	3,325	3,256	2.1%
1996	185	10	123	3,256	3,071	5.7%
1997	52	12	64	3,071	3,019	1.7%
1998	121	27	100	3,019	2,898	4.0%
1999	99	13	44	2,898	2,799	3.4%
2000	103	16	106	2,799	2,696	3.7%
2001	132	10	220	2,696	2,564	4.9%
2002	98	13	137	2,564	2,466	3.8%
2003	172	12	127	2,466	2,294	7.0%
2004	195	10	276	2,294	2,099	8.5%
2005	100	5	155	2,099	1,999	4.8%
2006	176	12	184	1,999	1,823	8.8%
2007	97	8	74	1,823	1,650	5.3%
2008	56	8	66	1,650	1,594	3.4%
2009	60	10	58	1,594	1,534	3.8%
total	2,169	227	2,138			59.4%
15 yr avg	114	11	119			4.7%

ELM TREES FUNGICIDED

year	public	private	total	cumulative public	cumulative private	cumulative total
2004	15	73	88	15	73	88
2005	32	76	108	47	149	196
2006	21	79	100	68	228	296
2007	515	79	594	583	307	890
2008	466	77	543	1049	384	1433
2009	436	73	509	1485	457	1942

Since 2007

12% of untreated elms have been lost.
1% of treated elms have been lost.

2008-2009 WEATHER DATA

2008 PRECIPITATION TOTALS IN INCHES

JAN	2008	1.75	1.93	110%
FEB	2008	1.63	3.53	217%
MAR	2008	2.65	2.63	99%
APR	2008	3.68	2.72	74%
MAY	2008	3.38	4.10	121%
JUNE	2008	3.63	4.18	115%
JULY	2008	3.51	4.76	136%
AUG	2008	4.62	3.73	81%
SEPT	2008	3.27	13.63	417%
OCT	2008	2.71	2.07	76%
NOV	2008	3.01	1.26	42%
DEC	2008	2.43	3.49	144%
TOTAL		30.83	48.03	156%

2009 PRECIPITATION TOTALS IN INCHES

JAN	2009	1.75	1.16	66%
FEB	2009	1.63	3.39	208%
MAR	2009	2.65	5.20	196%
APR	2009	3.68	5.19	141%
MAY	2009	3.38	3.63	107%
JUNE	2009	3.63	7.18	198%
JULY	2009	3.51	1.53	44%
AUG	2009	4.62	4.26	92%
SEPT	2009	3.27	1.03	31%
OCT	2009	2.71	6.04	223%
NOV	2009	3.01	NOT AVAILABLE	
DEC	2009	2.43	NOT AVAILABLE	
TOTAL THRU OCT		30.83	38.61	125%

2008-2009 WEATHER DATA

2008 TEMPERATURES IN DEGREES FAHRENHEIT

JAN	2008	22.0	23.5	107%
FEB	2008	26.6	23.0	86%
MAR	2008	36.9	34.9	95%
APR	2008	48.5	49.4	102%
MAY	2008	59.0	55.5	94%
JUNE	2008	68.6	70.8	103%
JULY	2008	73.3	74.0	101%
AUG	2008	71.9	72.7	101%
SEPT	2008	64.5	66.1	102%
OCT	2008	52.8	59.0	112%
NOV	2008	39.8	39.4	99%
DEC	2008	27.5	27.8	101%
TOTAL		591.4	596.1	101%

2009 TEMPERATURES IN DEGREES FAHRENHEIT

JAN	2009	22.0	15.8	72%
FEB	2009	26.6	28.2	106%
MAR	2009	36.9	39.6	107%
APR	2009	48.5	47.2	97%
MAY	2009	59.0	59.9	102%
JUNE	2009	68.6	67.6	99%
JULY	2009	73.3	69.4	95%
AUG	2009	71.9	70.5	98%
SEPT	2009	64.5	65.3	101%
OCT	2009	52.8	NOT AVAILABLE	
NOV	2009	39.8	NOT AVAILABLE	
DEC	2009	27.5	NOT AVAILABLE	
TOTAL THRU SEPT		471.3	463.5	98%

Cost to do Natural Lawn Care in Melin Park

Soil Test	$100
Top Dress	$4,200
Corn Gluten Meal	$3,824
Lime	$1,176
Compost Tea	$3,920
Organic Fertilizer	$2,400
Spot Weed Control	$100
Grass Seed	$3,040
Total	**$18,760**

Grass Seed Mixes Currently Used by the Village of Hinsdale

Greenskeeper Glamour Mixture

Fine-textured mix with quick germination, providing adaptability to moderate shade as well as full sunlight. Contains Kentucky bluegrass for winter hardiness and durability, along with turf-type ryegrasses for lasting appearance.

30% Kentucky Bluegrass 98/85
30% Creeping Red Fescue
40% Containing 2 of the following turf-type perennial ryegrasses: Accent, APM, Caddieshack or Monterey II

Seeding Rate:

- New lawns: 4-6 lbs. per 1,000 feet²
- Established lawns: 3-4 lbs. per 1,000 feet²

Field of Dreams Athletic Mixture

30% Goalkeeper Perennial Ryegrass
30% Top Gun Perennial Ryegrass
20% Blue Chip Kentucky Bluegrass
20% Freedom III Kentucky Bluegrass

Seeding Rate:

- New lawns: 3-5 lbs. per 1,000 feet²
- Established lawns: 2-3 lbs. per 1,000 feet²

"Step by Step"

GUIDE TO NATURAL TURF MANAGEMENT

A Season-by-Season Guide for Successful Natural Lawn Care

By Chip Osborne and Doug Wood

Step by Step
GUIDE TO NATURAL TURF MANAGEMENT

Step One: March/April

The Soil Test

Like a blood test when you go to the doctor, a soil test reveals what you can't see: it tells you what condition the soil is in and what kinds of amendments it might need. Using a clean sampling tube, take samples from various locations on the property (more samples for larger properties) at a 4 to 5 inch depth. Remove debris (roots, thatch) from the top of the sample, air dry the samples overnight, mix the samples thoroughly and send one cup of the mixture to the lab. Request a standard test, which usually includes soil pH, calcium, magnesium and potassium levels, phosphorus levels and Cation Exchange Capacity. Also, ask for a percentage of organic matter analysis.

Basic soil testing is available from university cooperative extensions (instructions and fee schedules are posted on their websites) and other labs. Detailed microbiology tests are offered by the Soil Foodweb. Basic tests range from $15 to $40, and biology tests range from $85 to $225.

Aeration

Compaction is the number one enemy of turfgrass, and is the most common problem faced by turf managers, particularly on playing fields with heavy traffic. Turf roots grow in the air spaces between soil particles, so compacted soil prevents them from penetrating deep into the soil where they can reach moisture and nutrients. If the soil is compacted to the point where a penetrometer reads more than 200 pounds per square inch in the top 3 inches of soil, aeration is required, using either a core or slice aerator. Aeration is stressful for turf and should only be undertaken when the grass is actively growing, but can be performed as often as every two to four weeks when necessary. Aerate in a criss-cross pattern until 15-20% of the soil surface has been exposed.

Compost Top Dress

Ideally, the organic matter percentage, or "OM," should be at or above 5%. If it's not, aerate and then top dress with a good quality compost. If the property has been chemically maintained, a 1/4 inch to 1/2 inch layer of compost (also called "soil conditioner") should be spread over the top of the entire lawn. Compost can be spread with a compost spreader, an air blower, or on small areas, by broadcasting with shovels. It will take about a yard of compost to cover 1000 sq ft with 1/2 inch of compost; one acre of turf will require approximately 40 yards.

First Mowing

Using sharp mower blades, cut the grass at 2 inches and remove and dispose of all clippings. This will help reduce the threat of lawn disease. Other than cutting game day fields, this is the only time clippings should be removed.

Step by Step
GUIDE TO NATURAL TURF MANAGEMENT

Step Two: March/April

Pre Emergence Weed Control with Corn Gluten

Corn gluten is an all-natural 100% organic pre-emergence weed control and fertilizer (it adds a 10% charge of nitrogen). Corn gluten prevents weed seeds from germinating, so it needs to be used at the right time; in the northeast, blooming forsythia is a good signal that it's time for corn gluten. Remember that corn gluten prevents grass seed as well as weed seeds from germinating, so you won't be able to over-seed for a few weeks after the corn gluten has been applied.

pH Balance with Lime

The ideal pH for turf grass is between 6.5 and 7.0. The soil test will reveal the pH of the soil, and in many cases, give you the recommended amounts of lime to add to the lawn. Keep in mind that you should never apply more than fifty pounds of lime per 1,000 sq ft. (If you need more lime, it will have to be in two applications.) Also remember that lime can take up to three months to become fully integrated into the soil, so you won't see the results in a soil test before then. Use calcitic lime if calcium level is low; dolomitic lime if magnesium levels are low.

Feed the Soil with Compost Tea

An application of compost tea (see step four for recipes and application rates) fortified with bacterial foods (feather meal, seed meals) and fungal foods (insoluble humic acid and kelp meal). will help slow the normally accelerated spring growth rate by tying up some nutrients. These will be cycled back to the plants later in the season. Apply higher rates of tea if foliar disease is present. You can also mix in milky spore bacteria to build its population in the soil.

Soil Detoxification and Inoculation
Using Other Amendments

Marine products such as kelp and seaweed contain minerals and add organic matter to the soil. They promote deep root growth which helps keep lawns green even during times of drought.

The minerals and nutrients found in rockdust are particularly useful in re-energizing soil that has been compromised by chemical use. It is also a natural source of potassium (K).

Mowing

Grass should be cut at 2.5 to 3 inches except where lower blade heights are required for sports. Remember never to cut more than the top 1/3 of the grass blade at any one time. Grass clippings should always be left on the lawn.

Step by Step
GUIDE TO NATURAL TURF MANAGEMENT

Step Three: April to June

Organic Fertilizer Application

The choice and application of the proper natural organic fertilizer is one of the most important aspects of natural lawn care. Unlike synthetic fertilizers, which are water soluble, natural organic fertilizers break down by the action of microbes which exist in the soil. In effect, you are feeding those microbes, which in turn make nutrients available to the plants.

Because of this slow-release characteristic, natural organic fertilizers will generally not produce the sudden, dramatic greening effect common to many commercial synthetic fertilizers with high nitrogen levels. On the other hand, because it remains in the soil for a longer period of time, less fertilizer will be required over the season. Fifty pounds will cover approximately 2,000 sq ft.

Fertilizers containing added phosphorus should generally be avoided unless a specific problem needs to be corrected. Increasing microbial life (bacteria and fungi) can help release phosphorus that is tied up in the soil. In many areas, excess phosphorus run off into streams and municipal water systems is a source of serious environmental problems.

As the level of organic matter is raised through the application of compost (the organic level should ideally be between 5% and 8%) the need for fertilizer is reduced.

Irrigation

Automatic sprinkler systems can be a great time saver, but they can also be a source of trouble. Over-watering is a primary cause of turf fungal problems, and can undo much of the work you do. The system should be calibrated to deliver no more than 1.5 inches of water per week, and even less if a rain event occurs. Placing an empty tuna can on the lawn, running the system and seeing how long it takes to fill the can will help you determine proper settings.

Spot Weed Control

Products containing combinations of vinegar and natural plant oils (e.g., "Burn Out") are a good choice as non-selective weed killers in sidewalks, driveways, gravel tracks and paths. These products can be found at professional lawn care distributors. In most cases the property must be flagged.

Step by Step
GUIDE TO NATURAL TURF MANAGEMENT

Step Four: June/July

Compost Tea

The application of high quality compost tea can be an effective way to continue to build soil quality, increase resistance to diseases and help sustain turf during a drought. Compost tea is made by steeping top quality compost in water while circulating the water and adding nutrients. Commercial tea brewers range in size from 5 to 500 gallons and are available from many manufacturers. You can spray tea from a backpack sprayer or a traditional spray rig. Remember that you are spraying live organisms, so remove fine mesh filter screens and allow the spray to fall gently on plant and turf surfaces.

Basic Compost Tea Recipe

50 gallons of de-chlorinated water
4-5 pounds of high quality compost
2 oz. molasses
3 oz. humic acid

Generally speaking, a tea brewed with a high bacterial content is preferable for turf; tea with a higher fungal content is recommended for foliar spray on trees and shrubs.

Tea should be mixed with water in sufficient dilution to achieve a rate of 15-20 gallons per acre. A typical mix is 20 gallons of tea to 100 gallons of water. Problem areas can be treated with a higher concentration of tea.

There appears to be some correlation between the application of compost tea and reduction of pest problems, but in most states it is illegal to make any claims or statements regarding the beneficial effects of compost tea on pests.

Over-Seeding

The best defense against weeds is a strong and healthy turf. Given the opportunity, grass plants will out-compete most weeds. Over-seeding, which is simply adding new grass plants to an existing lawn or field, rejuvenates the lawn with new life, fills in bare spots and keeps weeds from growing. Use a high quality seed or seed mix that is appropriate for your climate and has a minimum of noxious weeds. (Check the label for weed content.)

When over-seeding, you will want to reduce the height of the lawn in steps, eventually bringing it down to about two inches, to give the new seed a chance to get sunlight and germinate. Once the seed has sprouted you can begin bringing the lawn back up to 3 inches.

When sports playing schedules permit, allow grass to grow to 3.5 or even 4 inches. This will help develop robust root systems and create strong, disease and drought-resistant plants.

Step by Step
GUIDE TO NATURAL TURF MANAGEMENT

Step Five: July/August

Natural Pest and Disease Control

A healthy, well maintained natural lawn will be resistant to most pests and diseases. However, lack of organic matter, poor cultural practices, too much water, and other stresses can reduce turf's ability to fend off pests and diseases. When pests present themselves, here are some natural solutions:

Beneficial nematodes have proven to be very effective at dealing with grubs. These are microscopic worms that feed on grub larvae. Nematodes are aquatic animals, and need moisture and grubs to survive. Apply with water and keep the soil moist for a few days after application (see package for details). You can purchase nematodes from an insectiary or nursery that carries beneficials.

Milky Spore is actually a disease which can be an effective biological control for Japanese beetles. The best time to apply is mid-to late summer when the new brood have hatched and are beginning to feed.

Here are some typical turf problems and recommended natural solutions:

Symptom	Possible Cause	Solution
Dandelions	Lack of calcium, low pH	Apply calcium, keep pH high
Moss	Low pH, too much moisture	Add lime, improve drainage
Red Thread	Lack of nitrogen	Fertilize with organic fertilizer, check potassium and raise if necessary
Dollar Spot	Lack of nitrogen, excess thatch, drought stress	Fertilize with organic fertilizer, apply compost top dress, irrigate
Crabgrass	Turf cut too close, excess nitrogen, low pH	Raise cutting height, over-seed, use organic (low N) fertilizer, apply lime to raise pH, apply corn gluten in spring
Thatch	Excess irrigation, improper mowing, too much fertilizer	Apply compost top dress, raise mower blades, leave lawn clippings on the lawn, adjust irrigation
Patches of dead grass	Grubs	Apply beneficial nematodes
Compaction	Sports, high traffic, machinery	Apply compost top dress, over-seed, apply organic fertilizer, mechanical aeration if necessary

Step by Step
GUIDE TO NATURAL TURF MANAGEMENT

Step Six: September/October

New Construction

There is no question that fall is the best time to construct a new lawn or field. Once the days get shorter and the nights get longer, you'll have less competition from weeds. Start by removing all old growth and roots, but do not roto-till. Add whatever amendments may be indicated by a soil test (this is also the best time to fix texture or composition problems, if any), then add top soil as required and spread 1/2 inch of compost on top. Broadcast good quality, climate-appropriate seed and roll or tamp to ensure good soil-to-seed contact. Keep moist but not wet.

Root Growth Enhancement

In the fall, turf roots continue to grow long after the grass has stopped. Feeding the roots with natural growth stimulators such as seaweed extract will prepare the plants for a boost of new growth in the spring. Aeration may also be appropriate at this time.

Lime/Compost Application

Fall is the another window of opportunity for the application of lime (if needed) and compost. A good shot of compost now will give the turf a good supply of nutrients to begin a new season in the spring.

* * *

This document is not intended to address all situations which may be encountered in professional turf management. No representations are expressed or implied regarding the suitability of any product or technique described herein for any individual property. No liability is assumed or may be ascribed to Grassroots Environmental Education, its project partners, authors, contributors or underwriters.

We gratefully acknowledge the contributions of all of our instructors and contributors, including James Sottilo, Jeff Frank and Paul Sachs through his excellent book "Handbook of Successful Ecological Lawn Care" available from Amazon.com and other booksellers.

Village Soil Samples 2009

Brook Park (BRKPK)

Jackson St. Prairie (JKNST)

Melin Park (MLNPK)

Memorial Building (MEMBG)

Robbins Park Football (RBNPF)

Robbins Park 6th & Grant (RBNPK)

Veeck Park Center (VCKPC)

Veeck Park Baseball (VCKBB)

Lebanon
TURF PRODUCTS
Division of Lebanon Seaboard Corporation

Lebanon Turf Products
P.O. Box 180
Lebanon, PA. 17042-0180

Distributor: Arthur Clesen Inc./B.Goshorn

Client: VILLAGE OF HINSDALE/47266

Lebanon Salesman: Bob Bethel/Lebanon # 54

Laboratory Sample No.: 244240 - 244247

ANALYTICAL DATA

Sample ID	BRKPK	BKNST	MLNPK	MEMBG	RBNPF	RBNPK	VCKPC	VCKBB			
SOIL CHARACTERISTICS											
Soil pH	7.7	7.5	7.3	7.4	7.3	7.5	7.8	7.6			7.5
Buffer pH											
Soluble Salts mmhos/cm	0.35	0.27	0.30	0.42	0.38	0.35	0.57	0.40			0.38
Sodium ppm	11	23	12	13	21	4	51	39			22
SOIL NUTRIENTS											
P ppm	17	10	32	12	48	26	22	26			24
K ppm	289	289	283	259	226	160	153	149			226
Mg ppm	544	498	655	611	858	640	920	659			673
Ca ppm	3241	2582	2598	2340	3490	3334	3137	3365			3011
S ppm											
Zn ppm											
Mn ppm											
Cu ppm											
Fe ppm											
CEC and PERCENT BASE SATURATION											
CEC	21.5	17.9	19.2	17.5	25.3	22.4	24.0	22.9			21.3
%K	3.4	4.1	3.8	3.8	2.3	1.8	1.6	1.7			2.7
%Mg	21.1	23.2	28.4	29.1	28.3	23.8	32.0	24.0			26.3
%Ca	75.3	72.1	67.6	66.8	69.1	74.3	65.4	73.6			70.6
%Na	0.2	0.6	0.3	0.3	0.4	0.1	0.9	0.7			0.4
%H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0

Lebanon
TURF PRODUCTS
Division of Lebanon Seaboard Corporation

Date Reported
26-Feb-2009

Lebanon Turf Products
P.O. Box 180
Lebanon, PA. 17042-0180

Distributor Arthur Clesen Inc./B.Gosho
9710 W. 194th Street
Mokena, IL 60448

Client VILLAGE OF HINSDALE/47266
HINSDALE, IL 60521

Laboratory Turnaround
< 3 DAYS

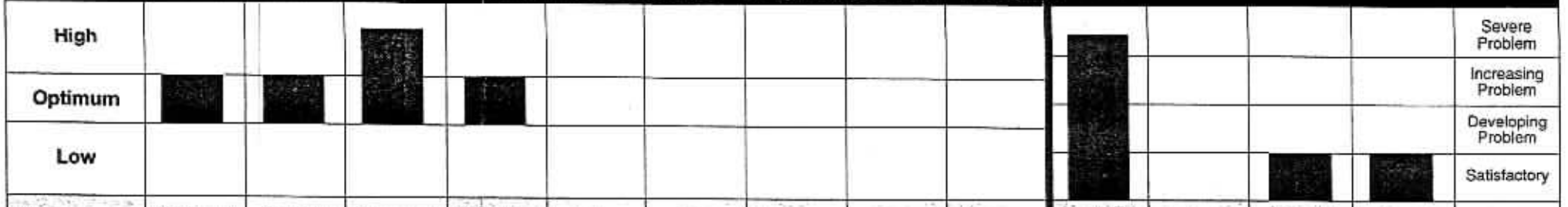
Information Sheet No.
30271

Lebanon Salesman
Bob Bethel/Lebanon # 54

Laboratory Sample No.
244240 - 244247

Samples Will Be Stored Until
00-XXX-00

GRAPHIC SUMMARY OF AVERAGE TEST RESULTS



	Phosphorus	Potassium	Magnesium	Calcium	Sulfur	Zinc	Manganese	Copper	Iron	Soil pH	Buffer pH	Soluble Salts	Sodium
	OPTIMUM NUTRIENT RANGE									OPTIMUM RANGE			
Optimum Range Level	ppm 14 to 25	ppm 201 to 250	ppm 340 to 480	ppm 2280 to 3800	ppm 9 to 20	ppm 1.1 to 1.1	ppm 5 to 25	ppm .8 to 3	ppm 5 to 50	5.5 to 6.5	6.9 to 7.5	mmhos/cm .1 to .59	% .1 to 4.5

FERTILIZER RECOMMENDATIONS

Sample ID	Soil Amendments			lbs/1000 sf
	Lime	Gypsum	Sulfur	
BRKPK	----	----	----	
BKNST	----	----	----	
MLNPK	----	----	----	
MEMBG	----	----	----	
RBNPF	----	----	----	
RBNPK	----	----	----	
VCKPC	----	----	----	
VCKBB	----	----	----	

Harris Laboratories
A Division of AgSource Cooperative Services

300 Speedway Circle Suite 2
Lincoln, NE 68502

Tel: 402-476-0300
Fax: 402-476-0302

Submitted By	Submitted For	Date Reported	Laboratory Nos.
Arthur Clesen Inc./B.Gosho 9710 W. 194th Street Mokena, IL 60448	VILLAGE OF HINSDALE/47266 HINSDALE, IL 60521	27-Feb-2009 Information Sheet No. 30271	244240 to 244247

SPECIAL TESTS / COMMENTS

PARTICLE SIZE ANALYSIS

SAMPLE ID	% SAND	% SILT	% CLAY	TEXTURE
BRKPK	----	----	----	----
BKNST	----	----	----	----
MLNPK	----	----	----	----
MEMBG	----	----	----	----
RBNPF	28.0	43.6	28.4	CLAY LOAM
RBNPK	42.0	37.6	20.4	LOAM
VCKPC	24.0	41.6	34.4	CLAY LOAM
VCKBB	28.0	37.6	34.4	CLAY LOAM

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SPECIAL TESTS / COMMENTS

PARTICLE SIZE ANALYSIS

SAMPLE ID	% SAND	% SILT	% CLAY	TEXTURE
BRKPK	----	----	----	----
BKNST	----	----	----	----
MLNPK	----	----	----	----
MEMBG	----	----	----	----
RBNPF	28.0	43.6	28.4	CLAY LOAM
RBNPK	42.0	37.6	20.4	LOAM
VCKPC	24.0	41.6	34.4	CLAY LOAM
VCKBB	28.0	37.6	34.4	CLAY LOAM

MSDS SHEETS
FOR CHEMICAL PESTICIDES USED IN THE VILLAGE OF HINSDALE

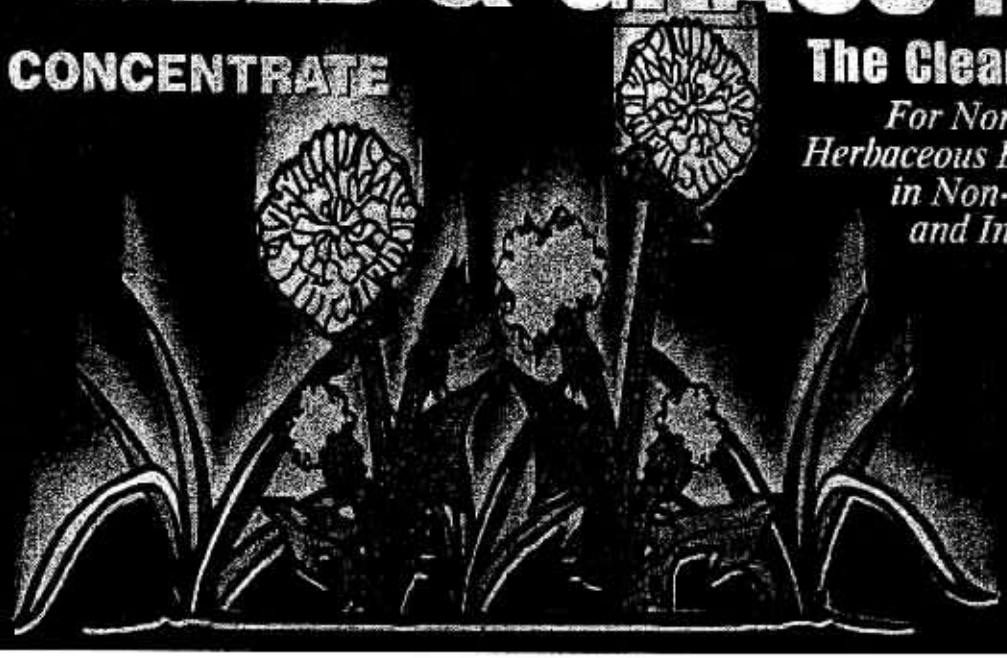
ST. GABRIEL LABORATORIES

Fast Acting

BurnOut

WEED & GRASS KILLER

CONCENTRATE



The Clearly Natural Choice

For Non-Selective Control of Herbaceous Broadleaf and Grass Weeds in Non-Crop, Right-of-Way, and Industrial Land Sites

ACTIVE INGREDIENTS

Acetic Acid: Ethanoic Acid [$C_2H_2O_2$]	25%
Inert Ingredients	75%
Total	100%

KEEP OUT OF REACH OF CHILDREN

DANGER: See back panel for additional precautionary statements

Net Contents: 1 U.S. Gallon

Fast Acting

KEEP OUT OF REACH OF CHILDREN

STATEMENT OF PRACTICAL TREATMENT

Si usted no etiquets, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

IF SWALLOWED: Call a doctor or get medical attention. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

IF ON SKIN: Wash with plenty of soap and water.
Get medical attention if irritation persists.

NOTE TO PHYSICIAN: Probable mucosal damage may contra-indicate the use of gastric lavage.

PRECAUTIONARY STATEMENT

DANGER: Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear goggles or face shield when handling. In case of contact, immediately flush eyes or skin with plenty of water. Get medical attention if irritation persists. Wash thoroughly with soap and water after handling. Do not apply the product in a way that will contact workers or other persons, either directly or through drift. Wear goggles or face shields, long sleeve shirts and trousers when handling.

PERSONAL PROTECTION EQUIPMENT (PPE): Applicators and other handlers must wear: Appropriate protective eyewear such as goggles or face shields. Long sleeved shirt and long pants. Waterproof gloves and shoes plus socks. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exists for PPE use detergent and hot water. Keep and wash PPE separately from other laundry. If irritation persists: Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS: Do not apply to water or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment wash waters.

EPA Registration No. 69836-1-63191
EPA Establishment NO. 063191-VA-1

6 99064 40012 5

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in area during application. For any requirement specific to your state or tribe, consult the agency responsible for pesticide regulation.

Burnout Weed & Grass Killer is a post emergent foliar active vegetation management product formulated to contain an organic acid. It is non-selective to green foliage and non-residual in soil. Burnout is recommended for the control of herbaceous broadleaf and grassy weeds on non-cropland areas, such as railroad rights-of-way, power stations, industrial sites and driveways; around farm buildings, storage areas and tank farms; in and around greenhouses; around plant nurseries and golf courses; and in fence rows and vacant lots.

Burnout Weed & Grass Killer is fast-acting. Foliar contact results in rapid desiccation and control of annual weeds and grasses, and top growth reduction of herbaceous perennial weeds and grasses (See Tables below.) Re-treatment is required for control of established perennial weeds.

FOR EARLY SEASON ANNUAL WEED CONTROL: When weeds are small (3 to 5 leaf) and actively growing, mix a spray solution consisting of 1 gallon of Burnout Weed & Grass Killer for each 3 gallons of water. Ensure adequate mixing. Spray unwanted vegetation to point of wetness.

SPOT TREATMENT APPLICATION: Use a single nozzle or a hand-gun applicator to direct the spray and thoroughly wet undesirable foliage. Retreatment of perennial weed growth will be required for control.

BROADCAST APPLICATION: Can be used for broadcast application. For broadcast applications, use a volume of 75 gallons to 125 gallons/acre. Thorough coverage is necessary to achieve desirable control. For dense populations and heavy foliage, use the higher spray volume to ensure adequate coverage. Apply with flat fan nozzles and sufficient pressure to achieve required coverage.

FOR CONTROL OF LARGER ANNUALS AND BURNDOWN OF PERENNIAL WEED GROWTH: Larger annual weeds and perennials are more difficult to control and may require re-treatment. Treat initially as recommended above and repeat if new growth of leaves appear. Thorough coverage of all foliage is necessary to achieve desirable control.

Best results are achieved from spring/early summer applications to actively growing young weeds. Weeds that are mature, dormant, or hardened due to moisture stress are more tolerant of herbicide treatments. Only contacted vegetation will be affected. Rainfast within one hour of application.

Avoid application to reactive metals such as aluminum, tin, iron, or items such as fencing or lawn furniture in order to prevent staining, mottling, or otherwise interfering with finished metal surfaces. In case of contact, rinse the sprayed surfaces with water. Do not enter or allow entry into treated areas during the restricted-entry interval (REI) of 48 hours.

DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.

NOTE: ALL CONTACTED VEGETATION WILL BE AFFECTED. AVOID CONTACT WITH DESIRABLE PLANTS. OVERSPRAY OR DRIFT WILL INJURE OR KILL CONTACTED VEGETATION.

TYPICAL WEEDS CONTROLLED

ANNUAL BROADLEAF WEEDS	PERENNIAL BROADLEAF WEEDS
Black Medic	Canadian (silvery) Cinquefoil
Chickweed	Dandelion
Cinquefoil (rough)	Plantain spp.
Lamb's-quarters	Toadflax
Mustard spp.	Tufted vetch
Oxalis spp.	Wild carrot
Pigweed spp.	**PERENNIAL GRASSES**
Ragweed spp.	Bluegrass
ANNUAL GRASSES	Quack grass
Crab grass	
Foxtail spp.	

Do not contaminate water, food, or feed by storage or disposal.

STORAGE: Keep from freezing. Store only in original tightly sealed containers and out of reach of children.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Packed for **St. Gabriel Laboratories**
14540 John Marshall Hwy.
Gainesville, Virginia 20155
1-800-501-0061
www.milkyspore.com
To reorder call: 800-801-0061

The label instructions for the use of this product reflect the opinion of experts based on research and field use. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, herbicide-resistant weed populations or the use of, or application of, the product contrary to label instructions, all of which are beyond the control of St. Gabriel Laboratories. ALL SUCH RISKS WILL BE ASSUMED BY THE USER. St. Gabriel Laboratories shall not be responsible for losses or damages resulting from the use of this product in any manner not set forth on this label. User assumes all risks associated with the use of this product in any manner not specifically set forth on this label.

St. Gabriel Laboratories warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above. ST. GABRIEL LABORATORIES DOES NOT MAKE OR AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. BUYER'S EXCLUSIVE REMEDY AND St. Gabriel Laboratories' EXCLUSIVE LIABILITY SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THIS PRODUCT. In no case shall St. Gabriel Laboratories or the seller be liable for consequential, special, or indirect damages resulting from the use of this product. The foregoing is a condition of sale by St. Gabriel Laboratories and is accepted as such by the buyer.

Material Safety Data Sheet

May be used to comply with

OSHA's Hazard Communication Standard, 29 CFR 1910.1200. This Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY *(As Used on Label and List)* **ST. Gabriel Laboratories BurnOut II Concentrate** Active ingredient: Clove Oil 12%, Sodium Laurly Sulfate 8% Inert ingredients: Vinegar,Citric Acid, Mineral oil, Lecithin, Water Total inert 80% Total 100%	

Section I

Manufacturer's Name: **St. Gabriel Laboratories**	Emergency Telephone Number **(800) 801-0061 Toll Free**
Address: **14044 Litchfield Drive**	Telephone Number for Information **(540) 672-0866**
Orange, Virginia 22960	Date Prepared April 25, 2003

Section II - Physical/Chemical Characteristics

Boiling Point	**102°C 230 F.**	Specific Gravity (H_2O = 1)	1.05
Vapor Pressure (mm Hg.)		Melting Point	**N/A**
Vapor Density (AIR = 1)		Evaporation Rate (Butyl Acetate = 1)	**>1.0**
Solubility in Water **Complete in all Proportions**			
Appearance and Odor **Milky White**			

Section III - Fire and Explosion Hazard Data

Flash Point (Method Used) **112 Degrees F**	Flammable Limits **Not tested**	LEL **N/A**	UEL **N/A**
Extinguishing Media Foam, Carbon Dioxide, or Dry Chemical extinguishers			
Special Fire Fighting Procedures Self contained breath apparatus.			
Fire and Explosion Hazard: The product is flammable.			
Unusual Fire and Explosion Hazards **NONE**			
Hazardous Decomposition Products: Acid Vapors, Carbon Dioxide, Carbon Monoxide			

Section IV - Reactivity Data

Stability: Reacts with organic and inorganic bases.			Conditions to Avoid: Contact with skin, eyes, or prolong inhalation. Do not ingest product.
Incompatibility: Bases and caustic compounds (alkaline compounds)			
Hazardous Decomposition or Byproducts None			
Hazardous Polymerization Will not occur.			Conditions to Avoid

Section V - Health Hazard Data

Route(s) of Entry:	Inhalation? **Yes**	Skin? **YES**	Ingestion? **YES**
Health Hazards: Contains acetic acid and is flammable and extremely corrosive. Contact with this product will result in severe eye irritation and possible permanent damage. Contact with this product will cause severe skin irritation and/or chemical burns. Breathing vapors will cause significant respiratory irritation, and pulmonary			

edema if prolonged. Ingestion of this product could cause burns and destroy tissue in the mouth, throat, and digestive tract.

Carcinogenicity:	NTP? **N/A**	IARC Monographs? **N/A**	OSHA Regulated? **N/A**

Signs and Symptoms of Exposure

Emergency and First Aid Procedures: Inhalation: Remove person to fresh air. Seek immediate medical assistance.

Ingestion: Seek immediate medical attention. Do not induce vomiting. Vomiting will cause further damage to the mouth and throat. If individual is conscious and alert, immediately rinsing mouth with water and give milk or water to drink. If possible, do not leave individual unattended.

Skin: Immediately flush skin with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Call a physician immediately. Wash clothing before reuse and discard contaminated shoes.

Eyes: Immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Call a physician immediately.

Section VI - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled: Cover the contaminated surface with sodium bicarbonate or a soda ash/flaked lime mixture (50-50). Mix and add water if necessary to form a slurry. Scoop up slurry and wash site with soda ash solution. Proper mixing procedures are essential. Trained personnel should conduct this procedure. Untrained personnel should be removed from the spilled area.

Waste Disposal Method: A leaking bottle may be placed in a plastic bag and normal disposal procedures followed. Liquid samples may be absorbed using vermiculite or sand, and disposed of in the normal way.
Precautions to Be taken in Handling and Storing Avoid contact with eyes, skin or clothing. Keep bottle/container tightly closed and store in a cool, dry place.
Other Precautions **N/A**

Section VII - Control Measures

Respiratory Protection: Wear a properly fitted half-face or full-face air purifying respirator which is approved for pesticides (NIOSH/MSHA IN U.S.) AND acid gas type cartridges.		
Ventilation: Product for outdoor use only.	Local Exhaust **N/A**	Special **N/A**

Protective Gloves: **Wear Neoprene, Nitrile, or natural rubber gloves.**	**Eye Protection** Wear chemical googles when handling the product and during application.
Other Protective Clothing or Equipment: Rubber apron is recommended when handling this product. Wear long sleeved shirt, long pants, socks and shoes.	

Section VIII - Special Precautions

Precautions to be taken in Handling and Storing: Keep container tightly closed when not in use. Store only in the original container in a cool, dry place.

The above information is believed to be correct, but does not purport to be all inclusive. This data should be used only as a guide in handling this material. BurnOut II/St. Gabriel Laboratories shall not be held liable for any damage resulting from handling or from direct contact with this product.

Pure Barnyard, Inc.

MATERIAL SAFETY DATA SHEET

SECTION 1 Product and Company Identification

Product Name: Cockadoodle DOO Organic Weed Control—Corn Gluten Meal

Chemical Name: 60% Corn Gluten Meal

Formula: N/A

Manufacturer: on behalf of Pure Barnyard, Inc. 199 Constitution Ave. Portsmouth, NH 03801

For other information Call: 1-603-373-6955 x13

Prepared on: Nov. 6, 2002

SECTION II Ingredients

		OSHA PEL		ACGIHTLV	
Ingredient (s): CAS NO. 66071-96-3					
Corn Gluten Meal	**% by Wt.**	**TWA**	**STEL**	**TWA**	**STEL**
	Corn Gluten Meal	Nuisance particulate,	--	Nuisance particulate,	--
	CAS NO. 8001-22-7	15 mg/m3 of total dust		10 mg/m3 of total	corn oil

SECTION III Hazard Identifications

Unaware of any hazards for this product. Avoid creating dust or exposing dust to ignition sources.

This material conforms to the Food and Drug Regulations. Since all the materials in this product are classified as feed ingredients, it is exempt from WHMIS. This MSDS is provided as general information for health and safety guidance

SECTION IV Physical/Chemical Characteristics Data

Boiling Point (0F): Not applicable	Specific Gravity (H20=1): Not applicable
Vapor Pressure (mm Hg): Not applicable	Moisture (% by Wt.): 9-12
Vapor Density (Air=1): Not applicable	Evaporation Rate (n-butyl acetate=1): Not applicable
Solubility in Water: Partially Soluable	Appearance and Odor: Goldenrod, slight odor

SECTION V -- Fire and Explosion Hazard Data

Flash Point (Method Used)- N/A
Extinguishing Media: Water, Chemical, CO2
Special Fire Fighting Procedures: None
Unusual Fire and Explosion Hazards: Dusts from grain products suspended in air are explosive at criteria air-dust concentrations

SECTION VI – Health Hazard Data

Carcinogenicity:	NTP: No	IARC: No	OSHA: No
Route of Entry:	Ingestions:	Unlikely; Not a Hazard	
	Inhalation:	As dust	
	Skin:	Not a Hazard	
	Eyes:	Contact may cause temporary mild irritation.	
Effects of Overexposure:			
Acute	Ingestion:	Not a hazard in normal industrial use.	
	Inhalation:	Not a hazard	
	Skin:	Not a hazard	
	Eyes:	Contact may cause temporary mild irritation.	
Chronic	Ingestion:	Not a hazard in normal industrial use.	
	Inhalation:	Not a hazard	
	Skin:	Not a hazard	
	Eyes:	Contact may cause temporary mild irritations.	
Emergency and First Aid Procedures:	Ingestions:	Get medical attention for individuals who ingest large amounts.	
	Inhalation:	Remove to fresh air	
	Skin	Wash with water	
	Eyes	Wash with water	

SECTION VII Reactivity Data

Stability: STABLE
Incompatibility (Materials to Avoid): Strong Oxidizing agents
Hazardous polymerization: Will not occur

SECTION VII Precautions For Safe Handling and Use

Precautionary Statements:	Avoid creating dust clouds.
Neutralizing Chemicals:	None
If Material is released or spilled	Follow all legislative requirements for non-hazardous waste disposal.
Waste Disposal Method:	Dry sweep, dry disposal.
Storage Requirements:	Clean, dry warehouse, ambient conditions.

SECTION VIII Control Measure

Ventilation Requirements:	Local Exhaust
Personal protective Equipment.	Eye: None Gloves: None Clothing: None
Respiratory Protection:	Use NIOSH approved respirator to limit exposure to dust when dust from product is present.

NOTE: The information in this **MSDS** is compiled in good faith from source considered to be accurate to the best of our knowledge and applies to activities within the scope of the intended use of the product. No warranty or representation respecting the accuracy of completeness of the data expressed or implied with respect to completeness or continuing accuracy of the information given here. We assumes no responsibility for any liability or damages relating thereto or for advising you regarding the protection of your employees, customers, or others. Users should make their own test to determine the applicability of such information.

Riverdale

TRI-POWER® SELECTIVE

HERBICIDE

FOR SELECTIVE BROADLEAF WEED CONTROL IN ORNAMENTAL LAWNS AND TURF GRASSES

ALSO FOR WOODY PLANTS, ROADSIDES, AND SIMILAR NON-CROP AREAS.

CONTROLS: Dandelion, Chickweed, Black medic, Knotweed, Plantain, Oxalis, Clover, Cocklebur, Thistle and many other species of broadleaf weeds; some of which are listed on this label.

CONTAINS MCPA, MECOPROP-p AND DICAMBA

GET THE OPTICAL ADVANTAGE™

ACTIVE INGREDIENTS:	
Dimethylamine Salt of 2-Methyl-4-Chlorophenoxyacetic Acid*	40.42%
Dimethylamine Salt of (+)-R-2-(2-Methyl-4-Chlorophenoxy)propionic Acid**	7.99%
Dimethylamine Salt of Dicamba (3,6-Dichloro-o-Anisic Acid)***	3.97%
INERT INGREDIENTS:	47.62%
TOTAL	100.00%

By Isomer Specific AOAC Method, Equivalent to:

*2-Methyl-4-Chlorophenoxyacetic Acid ..... 33.00%, 3.1 lbs./gal.

**(+)-R-2-(2-Methyl-4-Chlorophenoxy)propionic Acid .... 6.60%, 0.6 lbs./gal.

***3,6-Dichloro-o-Anisic Acid ..... 3.30%, 0.3 lbs./gal.

‡CONTAINS THE SINGLE ISOMER FORM OF MECOPROP-p

Tri-Power®—Is A Registered Trademark of Riverdale Chemical Company.

THE OPTICAL ADVANTAGE™ is a Trademark of Riverdale Chemical Company.

EPA REG. NO. 228-262

EPA EST. NO. 228-IL-1

For Use By Professional Turf Maintenance Personnel, Landscaping or Commercial Applicators Only

KEEP OUT OF REACH OF CHILDREN

DANGER

SEE INSIDE BOOKLET FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND STATEMENT OF PRACTICAL TREATMENT

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive. This concentrate causes irreversible eye damage. Harmful or fatal if swallowed. Harmful if inhaled. Avoid breathing spray mist. Do not get in eyes, on skin or on clothing. Wear face shield or goggles when mixing and loading this product. After product has been diluted in accordance with the directions for use on turf below, goggles, face shield or safety glasses are not required. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

IF SWALLOWED: Drink promptly a large quantity of milk, egg whites or gelatin solution, or, if these are not available, drink large quantities of water. Avoid alcohol.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

IF ON SKIN: If contacted with the concentrate, wash with plenty of soap and water. Get medical attention. If contact is made after this product has been diluted, wash with plenty of soap and water. Rinse thoroughly.

IF INHALED: Remove victim to fresh air and apply respiration if indicated.

ENVIRONMENTAL HAZARDS

Drift or runoff may adversely affect nontarget plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. When cleaning equipment, do not pour washwater on the ground; spray or drain over a large area away from wells and other water sources. Do not contaminate water when disposing of equipment washwaters. Do not apply this product through any type of irrigation system. Do not contaminate water used for irrigation or domestic purposes.

Most cases of groundwater contamination involving phenoxy herbicides such as MCPA and MCPP have been associated with mixing/loading and disposal sites. Caution should be exercised when handling these phenoxy pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing and transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. READ ENTIRE LABEL BEFORE USING THIS PRODUCT. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.

Tri-Power® is for use on Ornamental Turf, such as Lawns, Parks, Cemeteries, Golf Courses (Fairways, Aprons, Tees and Roughs), also Woody Plants, Roadsides, and similar non-crop areas. Not for use on turf being grown for sale or other commercial use as sod, or for commercial seed production or for research purposes.

USE PRECAUTIONS

Avoid drift of spray mist to vegetables, flowers, ornamental plants, shrubs, trees and other desirable plants. Do not pour spray solutions near desirable plants. Do not use on Dichondra, nor on lawns or turf where desirable clovers are present. Avoid fine mists. Use lawn type sprayer with coarse spray as wind drift is less likely. Avoid contact with exposed feeder roots of ornamentals and trees. Maximum control of weeds will be obtained from Spring or early Fall applications when weeds are actively growing. Use the higher rate for hard-to-control weeds. Do not exceed specified dosages for any area; be particularly careful within the dripline of tree and other ornamental species. Do not apply to newly seeded grasses until well established. Do not spray when air temperature exceeds 90°F.

For optimum results: (1) avoid applying during excessively dry or hot periods unless irrigation is used; (2) avoid applying if rainfall is expected within 24 hours, nor should lawns be irrigated (watered) for 24 hours following application; (3) turf should not be mowed 1 to 2 days before and following application; (4) reseed no sooner than 3 to 4 weeks after application of this product. Adding oil, wetting agent, or other surfactant to the spray may be used to increase effectiveness on weeds, but doing so may reduce selectivity to turf resulting in turf damage. Clean and rinse spray equipment using soap or detergent and water, and rinse thoroughly before reuse for other sprays.

Tri-Power® can be mixed with some liquid fertilizers or liquid iron materials. Because liquid fertilizers and liquid iron differ in pH, free ammonia content, density, salt concentration, and percentage of water, a compatibility test (given below) is recommended prior to mixing in the application equipment. All regulations, either State or Federal, relating to the application of liquid fertilizers or liquid iron and this product must be strictly followed. The following compatibility test should always be performed prior to full-scale mixing.

1. Pour 18 ounces of water into a quart jar.
2. Add 1 ounce of either the liquid fertilizer or liquid iron to be used.
3. Add 1 ounce of Tri-Power®.
4. Close jar and shake well.
5. Watch the mixture for several seconds after shaking and check again after 30 minutes.
6. If the mixture does not show signs of separating, the combination may be used. If the mixture foams excessively, gels, separates or gets very thick, do not combine for field application.
7. Compatibility may be improved by the use of a compatibility agent. Some suggested compatibility agents to try are Kalo Laboratories Complex, Hopkins Chemical's Unite, Farm Chemicals Inc.'s Compat, Harcros Chemicals' T-Mulz 734-2, Rigo Company's Rigo Compatibility Agent, Witco Chemical's Sponto 168D, Amoco Oil's Amoco Spray Mate and Universal Coop.'s Chem-Link. These agents are all used in the same manner. Follow the previously outlined test procedures and add ¼ ounce of the compatibility agent between steps (the compatibility agent must be added to the fertilizer or iron before adding the Tri-Power®).
8. If the mixture does not separate, gel, foam or get very thick, it may be used for field application. Mix only the amount to be sprayed. Do not allow to stand overnight.

WEEDS CONTROLLED BY TRI-POWER®

Bedstraw, Bindweed, Black Medic, Buckhorn, Burdock, Buttercup, Canada thistle, Carpetweed, Chickweed, Chicory, Clover, Cocklebur, Dandelion, Dock, Dog fennel, English daisy, Florida pusley, Frenchweed, Goldenrod, Ground ivy, Hawkweed, Healall, Heartleaf drymary, Henbit, Jimsonweed, Knotweed, Kochia, Lambsquarter, Lespedeza, Mallow, Morningglory, Mustard, Oxalis, Pennywort, Peppergrass, Pepperweed, Pigweed, Plantain, Poison ivy, Poison oak, Purslane, Ragweed, Red clover, Red sorrel, Sheep sorrel, Shepherdspurse, Smartweed, Speedwell, Spurge, Spurweed, Stinging nettle, Stitchwort, Thistle, Toadflax, Veronica, Wild aster, Wild carrot, Wild garlic, Wild geranium, Wild lettuce, Wild onion, Wild radish, Wood sorrel, Yarrow and many other broadleaf weeds.

ORNAMENTAL LAWNS AND TURFS

Cool Season Grasses: Apply Tri-Power Selective Herbicide at the rate of 2½ to 3½ pints in 20 to 240 gallons of spray solution per acre (0.9 to 1.25 fl. oz. in 0.5 to 4 gallons of water per 1,000 square feet) to control weeds growing in ornamental lawn turf planted to Kentucky bluegrass, perennial ryegrass, tall fescue or fine fescue.

Warm Season Grasses: Apply Tri-Power Selective Herbicide at the rate of 2 to 3 pints in 20 to 240 gallons of spray solution per acre (0.7 to 1.1 fl. oz. in 0.5 to 4 gallons of water per 1,000 square feet) to control weeds growing in Bermuda grass or zoysia grass. Applications to other grass species including bahiagrass, kikuyugrass, buffalograss, centipedegrass, carpetgrass or St. Augustinegrass should be avoided unless injury can be tolerated. Avoid applications to warm season grasses emerging from Winter dormancy unless a slight delay in Spring green-up can be tolerated.

(PR938&11 042194/RV 101698A)

Bentgrass Turf (Other Than Golf Course Greens and Tees): On closely mowed bentgrass, apply Tri-Power at a maximum rate of 2½ pints per acre (0.9 fluid ounces in 3 gallons of water per 1,000 square feet) in May or mid-August through September when weeds are actively growing. Exercise care when applying to avoid overdosing bentgrass, or turf injury may result. Slight turf yellowing should disappear after about 1 week.

NOTE

Care should be taken to avoid overdosing Bentgrass, St. Augustine, and Centipede grasses or injury may result. Large volumes of spray water will aid in obtaining uniform coverage. If hand-type sprayers are used, it is preferable to use a single nozzle sprayer rather than a multiple nozzle boom as sideways application with a boom where the spray from more than one nozzle is allowed to fall on the same area will result in heavy local over-application and subsequent turf discoloration or injury.

Herbi™ Controlled Droplet Applicator: For Cool Season Grasses—Add 1⅓ to 2½ pints of Tri-Power to the 5 pint Herbi bottle, then fill with water to make 5 pints of mixture or substitute ½ pint of a surfactant for water while agitating the solution. For Listed Warm Season Grasses—Apply 1¼ to 1⅔ pints of Tri-Power, then add water to make total of 5 pints of mixture. While walking at approximately 1 pace (3 feet) per second, spray entire contents over 33,000 square feet (¾ of an acre). Do not overlap (double coverage) at edge of spray patterns. Reduced rates (use ½ of rate shown above) of Tri-Power must be applied when grass is stressed from heat, drought, etc.

Herbi™ is a trademark of North American Micron.

Controlled Droplet Applicators:—(CDA), Atomizers, and Spinning Disk Applicators: For Cool Season Grasses—Use Tri-Power at the rate of 2½ to 3½ pints per acre (0.9 to 1.25 fluid ounces per 1,000 square feet) in sufficient water to assure coverage (1 to 4 gallons of water per acre is normal for this type of equipment).

For Listed Warm Season Grasses—Use 2 to 3 pints of Tri-Power per acre (0.7 to 1.1 fluid ounces per 1,000 square feet) in sufficient water to assure coverage (1 to 4 gallons of water per acre is normal for this type of equipment).

NOTE: For all grasses (1) Do not overlap spray patterns, (2) Use reduced rates if grass is stressed from heat, drought, etc., and (3) Follow CDA equipment spray instructions.

OTHER NON-CROP AREAS

Roadsides (Including Aprons and Guard Rails), Rights-of-Way, and Other Similar Non-Crop Areas: For the control of broadleaf weeds, mix at a rate of ¼ to ¾ gallon of Tri-Power per 50 to 300 gallons of water. This mixture will cover 43,500 square feet. Thoroughly saturate all weeds with spray mixture. Apply any time between the time when plants come into full leaf (Spring) to when the plants begin to go dormant. Best results are obtained when weeds are young and actively growing. Do not cut weeds until herbicide has translocated throughout the plant causing root death. For small broadleaf weeds, use the lower rate. Heavy, dense stands require the higher rate of 3 ounces of Tri-Power per gallon of water and spray to thoroughly wet all foliage.

For Control of Woody Plants: Apply to both stems and foliage any time from the time foliage is completely matured until the time plants start to go dormant. All leaves, stems and suckers must be completely wet to the ground line for effective control. Regrowth may be anticipated on the more resistant species. Add ⅔ gallons of Tri-Power to 100 gallons of water applying 200 to 600 gallons of spray mixture per 43,500 square feet depending upon the height and thickness of the brush. Mix thoroughly before spraying.

STORAGE AND DISPOSAL

STORAGE: Always store pesticides in a secured warehouse or storage building. Do not store near seeds, fertilizers, insecticides or fungicides. Store at temperatures above 32°F. If allowed to freeze, remix before using. This does not alter this product. Containers should be opened in well ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

WARRANTY

Riverdale warrants that this herbicide conforms to the chemical description on its label. When used in accordance with label directions under normal conditions, this herbicide is reasonably fit for its intended purposes. Since timing, method of application, weather, plant and soil conditions, mixtures with other chemicals and factors affecting the use of this product are beyond our control, no warranty is given concerning the use of this product contrary to label directions or under conditions which are abnormal or not reasonably foreseeable. The user assumes all risks of any such use.

Nufarm

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night: 1-800-424-9300.
For Medical Emergencies Only, Call 1-877-325-1840.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Tri-Power® Selective Herbicide
Synonyms: Herbicide Mixture of MCPA, Mecoprop-p (MCPP-p) and Dicamba
EPA Reg. No.: 228-262

Company Name: Nufarm Americas Inc.
150 Harvester Drive, Suite 200
Burr Ridge, IL 60527

Date of Issue: May 15, 2006 **Supersedes:** December 11, 2001
Sections Revised: All - new ANSI format

2. HAZARDS IDENTIFICATION

Emergency Overview:
Appearance and Odor: Dark amber colored liquid with slight ammonia odor.
Warning Statements: Keep out of reach of children. DANGER. Corrosive. Concentrate causes irreversible eye damage. Harmful or fatal if swallowed. Harmful if inhaled. Avoid breathing spray mist. Do not get in eyes, on skin or on clothing.

Potential Health Effects:
Likely Routes of Exposure: Inhalation, eye and skin contact.
Eye Contact: Direct or prolonged eye exposure to the concentrated product may cause irreversible eye damage.
Skin Contact: Slightly toxic and minimally irritating based on toxicity studies. Overexposure by skin absorption may cause symptoms similar to those for ingestion.
Ingestion: Harmful if swallowed. May cause nausea, vomiting, abdominal pain, decreased blood pressure, muscle weakness, muscle spasms.
Inhalation: Harmful if inhaled. May cause symptoms similar to those from ingestion.
Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

See Section 11: TOXICOLOGICAL INFORMATION for more information.

Potential Environmental Effects:
Drift or runoff may adversely affect non-target plants.

See Section 12: ECOLOGICAL INFORMATION for more information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
Dimethylamine Salt of 2-Methyl-4-Chlorophenoxyacetic Acid	2039-46-5	40.42
Dimethylamine Salt of (+)-R-2-(2-Methyl-4-Chlorophenoxy) propionic Acid	66423-09-4	7.99
Dimethylamine Salt of Dicamba (3,6-Dichloro-o-Anisic Acid)	2300-66-5	3.97
Other Ingredients		47.62

4. FIRST AID MEASURES

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If on Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable due to aqueous formulation
Autoignition Temperature: Not determined **Flammability Limits:** Not determined

Extinguishing Media: Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.
Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.
Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.
Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

National Fire Protection Association (NFPA) Hazard Rating:
Rating for this product: Health: 2 **Flammability:** 1 **Reactivity:** 0
Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.
Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.
Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.
Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.
Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Handling:
Avoid breathing spray mist. Do not get in eyes or on clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Storage:
Always store pesticides in a secured warehouse or storage building. Store at temperatures above 32°F. If allowed to freeze, remix before using. This does not alter the product. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not store near open containers of fertilizer, seed, or other pesticides. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:
Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:
Eye/Face Protection: To avoid contact with eyes, wear face shield or goggles when mixing and loading this product. An emergency eyewash or water supply should be readily accessible to the work area.
Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. An emergency shower or water supply should be readily accessible to the work area.
Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.
General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

	OSHA		ACGIH		
Component	TWA	STEL	TWA	STEL	Unit
DMA Salt of MCPA	NE	NE	NE	NE	
DMA Salt of Mecoprop-p	NE	NE	NE	NE	
DMA Salt of Dicamba	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Dark amber colored liquid with slight ammonia odor.

Boiling Point:	Not determined	**Solubility in Water:**	Soluble
Density:	9.4 pounds/gallon	**Specific Gravity:**	1.13 @ 20°C
Evaporation Rate:	Not determined	**Vapor Density:**	Not determined
Freezing Point:	32°F (0°C)	**Vapor Pressure:**	Not determined
pH:	7.5 – 8.5	**Viscosity:**	30.16 cps @25°C

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Chemical Stability: This material is stable under normal handling and storage conditions.
Conditions to Avoid: Excessive heat. Do not store near heat or flame.
Incompatible Materials: Strong oxidizing agents: bases and acids.
Hazardous Decomposition Products: Under fire conditions, may produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological Data:
Data from laboratory studies on this product are summarized below:
Oral: Rat LD_{50}: 1,400 mg/kg; FIFRA Category III
Dermal: Rabbit LD_{50}: >2,000 mg/kg; FIFRA Category III
Inhalation: Rat 4-hr LC_{50}: > 0.23 mg/l; FIFRA Category II
Eye Irritation: Rabbit: Severely irritating/corrosive; FIFRA Category I
Skin Irritation: Rabbit: Slightly irritating; FIFRA Category IV
Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to phenoxy herbicides may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods. Repeated overexposure to dicamba may cause liver changes or a decrease in body weight.
Carcinogenicity / Chronic Health Effects: The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as a class 2B carcinogen, the category for limited evidence for carcinogenicity in humans. However, newer MCPA rat and mouse lifetime feeding studies, as well as a more current MCPP lifetime feeding study in rats, did not show carcinogenic potential. Dicamba did not cause cancer in long-term animals studies. The U.S. EPA has given dicamba a Class D classification (not classifiable as to human carcinogenicity).
Reproductive Toxicity: MCPA studies in laboratory animals have shown testicular effects and lower male fertility. No impairment of reproductive function attributable to MCPP has been noted in laboratory animal studies. Dicamba did not interfere with fertility in reproduction studies in laboratory animals.
Developmental Toxicity: MCPA and MCPP studies in laboratory animals have shown decreased fetal body weights and delayed development in the offspring at doses toxic to mother animals. Animal tests with dicamba have not demonstrated developmental effects.
Genotoxicity: There have been some positive and some negative studies, but the weight of evidence is that neither MCPA nor MCPP is mutagenic. Animal tests with dicamba did not demonstrate mutagenic effects.

Assessment Carcinogenicity:
This product contains substances that are considered to be probable or suspected human carcinogens as follows:

	Regulatory Agency Listing As Carcinogen			
Component	ACGIH	IARC	NTP	OSHA
Chlorophenoxy Herbicides	No	2B	No	No

See Section 2: HAZARDS IDENTIFICATION for more information.

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Data on MCPA DMA:

96-hour LC_{50} Bluegill:	>310 mg/l	Bobwhite Quail Oral LD_{50}:	390 mg/kg
96-hour LC_{50} Rainbow Trout:	230 mg/l	Mallard Duck 8-day Dietary LC_{50}:	>5,620 ppm
48-hour EC_{50} Daphnia:	190 mg/l		

Data on Mecoprop-p:

96-hour LC_{50} Bluegill:	>100 mg/l (literature)
48-hour EC_{50} Daphnia:	>270 mg/l (literature)
72-hour EC_{50} Green Algae:	>270 mg/l (literature)

Data on Dicamba:			
96-hour LC_{50} Bluegill:	135 mg/l	Bobwhite Quail 8-day Dietary LC_{50}:	>10,000 ppm
96-hour LC_{50} Rainbow Trout:	135 mg/l	Mallard Duck 8-day Dietary LC_{50}:	>10,000 ppm
48-hour EC_{50} Daphnia:	110 mg/l		

Environmental Fate:
MCPA DMA rapidly dissociates to parent MCPA in the environment. In soil, MCPA is microbially degraded with a typical half-life of approximately 10 to 14 days. Mecoprop-p DMA rapidly dissociates to parent mecoprop-p in the environment. In soil, mecoprop-p is microbially degraded with a typical half-life of approximately 11 to 15 days. Dicamba has low bioaccumulation potential, is not persistent in soil, is highly mobile in soil and degrades rapidly.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:
Pesticide wastes are acutely hazardous. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed, labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling and Disposal:
Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

For Department of Transportation (DOT) regulatory information, if required, consult transportation regulations, product shipping papers or call Nufarm's DOT Manager at 708-755-2104, Monday through Friday, 8:00 AM to 5:00 PM Central Time.

15. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:
Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):
Immediate, Delayed

Section 313 Toxic Chemical(s):
Dicamba (CAS No. 1918-00-9), 3.30% equivalent by weight in product

Reportable Quantity (RQ) under U.S. CERCLA:
Dicamba (CAS No. 1918-00-9) 1,000 pounds

RCRA Waste Code:
None

State Information:
Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not Listed.

16. OTHER INFORMATION

This Material Safety Data Sheet (MSDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This MSDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

Tri-Power is a registered trademark of Nufarm Americas Inc.

Arbotect® 20-S

Fungicide

For Dutch Elm Disease and Sycamore Anthracnose

Active Ingredient:

Thiabendazole (CAS No. 148-79-8) (equivalent to 20% 2-(4-thiazolyl) benzimidazole)	26.6%
Other Ingredients:	73.4%
Total:	100.0%

KEEP OUT OF REACH OF CHILDREN.

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-892
EPA Est. 39578-TX-1
Product of India
Formulated in the USA
SCP 892A-L1G 0503
1 gallon
Net Contents

syngenta

FIRST AID

If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Do not give any liquid to the person. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24 Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call 1-800-888-8372	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed. May irritate skin. Avoid contact with skin or eyes.

Environmental Hazards

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, Inc. or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of the product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

Prohibitions

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

Pesticide Storage

Store in original containers only. Keep container closed when not in use. Do not store near food or feed.

Pesticide Disposal

Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures under the Resource Conservation and Recovery Act.

Container Disposal

Do not reuse container. Triple rinse (or equivalent), then puncture and dispose of in a sanitary landfill or alternatives allowed by State and local authorities.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

APPLICATION PROCEDURES

Elm Trees—1 Year Treatment—Aids in the Control of Dutch Elm Disease

Preventive Treatment—For each 5 inches of trunk diameter, inject 1 fl. oz. of Arbotect® 20-S in 40 fl. oz. (1¼ qts.) of water to 2 fl. oz. of Arbotect 20-S in 80 fl. oz. (2½ qts.) of water. Use the higher levels of Arbotect 20-S under high disease pressure situations.

Preventive applications should be made when leaves approach full size, usually in late May or June.

Therapeutic Treatment—For each 5 inches of trunk diameter, inject 2 fl. oz. of Arbotect 20-S in 80 fl. oz. (2½ qts.) of water to 4 fl. oz. of Arbotect 20-S in 160 fl. oz. of water. Use the higher levels of Arbotect 20-S under high disease pressure situations.

Therapeutic applications should be made as soon as the current year infections are seen, usually in late June through August.

For optimum disease control, preventive treatment is recommended. When a tree shows more than 5% crown symptoms, treatment may not be effective. Treatment should be used in conjunction with an insect control and sanitation program (pruning of diseased limbs) in order to obtain best results. Trees that are 5 inches or less in diameter at chest height should not be treated.

Place injection sites as near to ground level as possible at 3 to 10-inch intervals around the trunk with a maximum hole diameter of ½ inch using a minimum of 3 or 4 equally spaced injection points per tree.

Elm Trees—3 Year Treatment—For Preventive and Therapeutic Treatment of Dutch Elm Disease

Inject 12 fl. oz. of Arbotect 20-S for each 5 inches of trunk diameter. Dilute each 2.0 fl. oz. of Arbotect 20-S with 1 gal. of water. Inject into any exposed root flares, below ground, once every three years. The maximum diameter of the injection holes should be ½ inch. Do not use this treatment if trees are less than 10 inches in diameter. When a tree shows more than 5% crown symptoms, treatment may not be effective. Treatment should be used in conjunction with an insect control and sanitation program (pruning of diseased limbs) in order to obtain best results.

Sycamore Trees—Aids in the Control of Sycamore Anthracnose

For each 5 inches of trunk diameter, inject 4 fl. oz. of Arbotect 20-S diluted with 80-160 fl. oz. of water (one part Arbotect 20-S to between 20 and 40 parts of water).

For best results, injections should be made in late summer or early fall, in each of two consecutive years. Repeat treatments may be necessary if the disease reappears.

Place injection sites at 3 to 10-inch intervals around the trunk with a maximum hole diameter of ½ inch using a minimum of 3 or 4 equally spaced injection points per tree. Injection sites may be placed in root flares at or below ground level or in the trunk as near to ground level as possible. Trees that are 5 inches or less in diameter at chest height should not be treated. If pressure injection is to be used, do not exceed 100 psi.

Do not dilute Arbotect 20-S with highly alkaline water as a precipitate may form.

Arbotect 20-S is to be used by trained arborists and others trained in injection techniques and in the identification of Dutch elm disease and sycamore anthracnose.

For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481.

Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com
SCP 892A-L1G 0503

syngenta

MATERIAL SAFETY DATA SHEET

Syngenta Crop Protection, Inc.
Post Office Box 18300
Greensboro, NC 27419

In Case of Emergency, Call
1-800-888-8372

1. PRODUCT IDENTIFICATION

Product Name: **ARBOTECT 20-S**
Product No.: A10345A

EPA Signal Word: Caution

Active Ingredient(%): Thiabendazole (26.6%)
CAS No.: 148-79-8

Chemical Name: 1H-Benzimidazole, 2-(4-thiazolyl)-

Chemical Class: Benzimidazole Fungicide

EPA Registration Number(s): 100-892

Section(s) Revised: 2, 3, 8, 11, 15, 16

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Hypophosphorus Acid (50% Solution)	Not Established	Not Established	Not Established	No
Thiabendazole (26.6%)	Not Established	Not Established	10 mg/m³ TWA ***	No

*** Syngenta Occupational Exposure Limit (OEL)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.
Syngenta Hazard Category: B, S

3. HAZARDS IDENTIFICATION

Symptoms of Acute Exposure

May cause mild skin irritation.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Yellow orange liquid
Odor: Weak, like hydrogen sulfide

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison contol center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Eye Contact: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center

or doctor for treatment advice.

Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.

Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test Method):	Not Available	
Flammable Limits (% in Air):	Lower: % Not Applicable	Upper: % Not Applicable
Autoignition Temperature:	Not Available	
Flammability:	Not Applicable	

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire

Use dry chemical, foam or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact: Where eye contact is likely, use chemical splash goggles.

Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Inhalation: A respirator is not normally required when handling this substance. Use effective engineering controls to comply with occupational exposure limits.

In case of emergency spills, use a NIOSH approved respirator with any N, R, P or HE filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Yellow orange liquid
Odor:	Weak, like hydrogen sulfide
Melting Point:	Not Applicable
Boiling Point:	212°F
Specific Gravity/Density:	1.10 @ 77°F (25°C)
pH:	2.7 (1% suspension in water)

Solubility in H2O

Thiabendazole: 30mg/l (pH 7, pH 10) @ 68°F in water

Vapor Pressure

Thiabendazole: 4.0 x 10(-9) mmHg @ 77°F (25°C)

10. STABILITY AND REACTIVITY

Stability:	Stable under normal use and storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	None known.
Materials to Avoid:	Oxidizing agents (e.g., chlorates, nitrates)
Hazardous Decomposition Products:	Can decompose at high temperatures forming toxic gases.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

Ingestion:	Practically Non-Toxic	
	Oral (LD50 Rat) :	> 5,000 mg/kg body weight
Dermal:	Practically Non-Toxic	
	Dermal (LD50 Rat) :	> 5,050 mg/kg body weight
Inhalation:	Not Available	
	Inhalation (LC50 Rat) :	Not Available
Eye Contact:	Non-Irritating (Rabbit)	
Skin Contact:	Practically Non-Irritating (Rabbit)	
Skin Sensitization:	Not a Sensitizer (Guinea Pig)	

Reproductive/Developmental Effects

Thiabendazole: Decreased fetal weights and increased invidence of resorptions observed in dose levels that were maternally toxic. An increase in skeletal defects and cleft palate was observed in fetuses of mice.

Chronic/Subchronic Toxicity Studies

Thiabendazole: Increased incidence of anemia and changes in the thyroid, liver, spleen, kidney and gall bladder in rats and dogs.

Carcinogenicity

Thiabendazole: None observed.

Other Toxicity Information

None

Toxicity of Other Components

Hypophosphorus Acid (50% Solution)

Test results reported in Section 11 for the final product take into account any acute hazards related to the hypophosphorus acid in the formulation.

Target Organs

Active Ingredients

Thiabendazole: Thyroid, liver, spleen, kidney, gall bladder, blood

Inert Ingredients

Hypophosphorus Acid (50% Solution): Not Applicable

12. ECOLOGICAL INFORMATION

Summary of Effects

Thiabendazole:

Very toxic to aquatic organisms. The aquatic toxicity is not increased significantly by chronic exposure. Does not bioaccumulate in fish and is rapidly metabolized.

Eco-Acute Toxicity

Thiabendazole: Invertebrates (Water Flea) LC50/EC50 0.81 ppm
Fish (Trout) LC50/EC50 0.55 ppm
Fish (Bluegill) LC50/EC50 19 ppm
Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,620 ppm
Birds (8-day dietary - Mallard Duck) LC50/EC50 > 5,620 ppm

Eco-Chronic Toxicity

Thiabendazole: Not Available

Environmental Fate

Thiabendazole:

The information presented here is for the active ingredient, thiabendazole.
Low bioaccumulation potential. Stable in soil and water. Stable in soil and water. Sinks in water (after 24 h).

13. DISPOSAL CONSIDERATIONS

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Corrosive

Listed Waste: D002

14. TRANSPORT INFORMATION

DOT Classification

Ground Transport - NAFTA
Proper Shipping Name: Pesticides, Liquid, Toxic, N.O.S. (Hypoposphorus Acid Solution)
Hazard Class or Division: Class 6.1
Identification Number: UN 2902
Packing Group: PG III

B/L Freight Classification

Fungicides, NOI, Poison

Comments

Water Transport - International
Proper Shipping Name: Pesticides, Liquid, Toxic, N.O.S. (Hypoposphorus Acid Solution)
Hazard Class or Division: Class 6.1
Identification Number: UN 2902
Packing Group: PG III

15. REGULATORY INFORMATION

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard

Section 313 Toxic Chemicals: Thiabendazole (26.6%) (CAS No. 148-79-8)

California Proposition 65

Not Applicable

CERCLA/SARA 302 Reportable Quantity (RQ)

None

RCRA Hazardous Waste Classification (40 CFR 261)

Corrosive D002

TSCA Status

Exempt from TSCA, subject to FIFRA

16. OTHER INFORMATION

NFPA Hazard Ratings		HMIS Hazard Ratings	
Health:	1	Health:	1
Flammability:	1	Flammability:	1
Instability:	0	Reactivity:	0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 06/05/1989
Revision Date: 10/28/2004 Replaces: 04/30/2004

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

RSVP# : SCP-955-892A-00128L

End of MSDS

Biological Larvicide

VectoBac® 12AS

Aqueous Suspension

Active Ingredient:	
Bacillus thuringiensis, subsp. *israelensis*, strain AM 65-52, fermentation solids and solubles	11.61%
Other Ingredients	88.39%
Total	100.00%

Potency: 1200 International Toxic Units (ITU) per mg
(Equivalent to 4.84 billion ITU per gallon, 1.279 billion ITU per liter)

There is no direct relationship between intended activity (potency) and the Percent Active Ingredient by Weight.

EPA Reg. No.73049-38
EPA Est. No. 33762-IA-001 List No. 5605

INDEX:

1.0 First Aid
2.0 Precautionary Statements
2.1 Hazard to Humans (and Domestic Animals)
2.2 Physical and Chemical Hazards
3.0 Directions for Use
3.1 Chemigation
4.0 Storage and Disposal
5.0 Ground and Aerial Application
6.0 Application Directions
7.0 Nuisance Flies
8.0 Nuisance Aquatic Midges
9.0 Chemigation
9.1 Rice-Flood (Basin) Chemigation
10.0 Small Quantity Dilution Rates
11.0 Notice to User

KEEP OUT OF REACH OF CHILDREN

CAUTION

1.0 FIRST AID

If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-315-9819 (24 hours) for emergency medical treatment and/or transport emergency information. For all other information, call 1-800-323-9597.

2.0 PRECAUTIONARY STATEMENTS

2.1 HAZARD TO HUMANS (AND DOMESTIC ANIMALS)

CAUTION

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash contaminated clothing before reuse.

Mixer/loaders and applicators not in enclosed cabs or aircraft must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

2.2 Physical and Chemical Hazards

Diluted or undiluted VectoBac 12AS can cause corrosion if left in prolonged contact with aluminum spray system components. Rinse spray system with plenty of clean water after use. Care should be taken to prevent contact with aluminum aircraft surfaces, structural components and control systems. In case of contact, rinse thoroughly with plenty of water. Inspect aluminum aircraft components regularly for signs of corrosion.

3.0 DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply directly to finished drinking water reservoirs or drinking water receptacles when water is intended for human consumption.

Do not apply when weather conditions favor drift from treated areas. Do not apply to metallic painted objects, such as automobiles, as spotting may occur. If spray is deposited on metallic painted surfaces, wash immediately with soap and water to avoid spotting.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the treatment coordinator are responsible for considering all these factors when making decisions.

3.1 Chemigation

Do not apply this product through any type of irrigation system unless labeling on chemigation is followed.

4.0 STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

STORAGE: Store in a cool, [less than 86° F (30° C)], dry place.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Do not reuse container.

5.0 GROUND AND AERIAL APPLICATION

VectoBac 12AS may be applied in conventional ground or aerial application equipment with quantities of water sufficient to provide uniform coverage of the target area. The amount of water will depend on weather, spray equipment, and mosquito habitat characteristics. Do not mix more VectoBac 12AS than can be used in a 72-hour period.

CONTINUED

For most ground spraying, apply in 5-100 gallons of water per acre using hand-pump, airblast, mist blower, etc., spray equipment.

For aerial application, VectoBac 12AS may be applied either undiluted or diluted with water. For undiluted applications, apply 0.25 to 2.0 pt/acre of VectoBac 12AS through fixed wing or helicopter aircraft equipped with either conventional boom and nozzle systems or rotary atomizers.

For diluted application, fill the mix tank or plane hopper with the desired quantity of water. Start the mechanical or hydraulic agitation to provide moderate circulation before adding the VectoBac 12AS. VectoBac 12AS suspends readily in water and will stay suspended over normal application periods. Brief recirculation may be necessary if the spray mixture has sat for several hours or longer. AVOID CONTINUOUS AGITATION OF THE SPRAY MIXTURE DURING SPRAYING.

Rinse and flush spray equipment thoroughly following each use.

For blackfly aerial applications, VectoBac 12AS can be applied undiluted via fixed wing or helicopter aircraft equipped with either conventional boom and nozzle systems or open pipes. Rate of application will be determined by the stream discharge and the required amount of VectoBac 12AS necessary to maintain a 0.5 - 25 ppm concentration in the stream water. VectoBac 12AS can also be applied diluted with similar spray equipment. Do not mix more VectoBac 12AS than can be used in a 72-hour period.

6.0 APPLICATION DIRECTIONS

Do not apply when wind speed favors drift beyond the area of treatment.

Mosquito Habitat	Suggested Rate Range*
(Such as the following examples): Irrigation ditches, roadside ditches, flood water, standing ponds, woodland pools, snow melt pools, pastures, catch basins, storm water retention areas, tidal water, salt marshes and rice fields.	0.25 - 2 pts/acres
In addition, standing water containing mosquito larvae, in fields growing crops such as: Alfalfa, almonds, asparagus, corn, cotton, dates, grapes, peaches and walnuts, may be treated at the recommended rates.	
When applying this product to standing water containing mosquito larvae in fields growing crops, do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.	
Polluted water (such as sewage lagoons, animal waste lagoons).	1 - 2 pts/acre

*Use higher rate range in polluted water and when late 3rd and early 4th instar larvae predominate, mosquito populations are high, water is heavily polluted, and/or algae are abundant.

Blackflies Habitat	Suggested Rate Range
Streams	
Stream water† (=ppm) for 1 minute exposure time	0.5 - 25 mg/liter
Stream water† (=ppm) for 10 minutes exposure time	0.05 - 2.5 mg/liter

†Use higher rate range when stream contains high concentration of organic materials, algae, or dense aquatic vegetation.

†Discharge is a principal factor determining carry of Bti. Use higher rate or increase volume by water dilution in low discharge rivers or streams under low volume (drought) conditions.

7.0 NUISANCE FLIES

For control of nuisance flies (*Psychoda* spp., *Chironomus* spp.) in sewage treatment facilities utilizing trickling filter systems.

APPLICATION DIRECTIONS

Nuisance Fly Habitat	Suggested Rate Range*
Trickling filter system of wastewater treatment plants	10 - 20 mg/liter a.(0.833-1.67 ml) per liter of wastewater feed to the filter per 30 minutes

* Use high rate for control of *Chironomus* spp. Apply undiluted with pre-calibrated pump or other device into the wastewater feeding into the filters for a period of 30 minutes. Repeat applications as needed after 2-4 weeks. Control of *Chironomus* spp. may take up to 2 weeks.

8.0 NUISANCE AQUATIC MIDGES

For control of *Chironomine* midges (*Chironominae: Chironomini*) inhabiting shallow, manmade and natural lakes or ponds.

APPLICATION DIRECTIONS

Nuisance Midge Habitat	Suggested Rate Range*
Shallow Lakes and Ponds per sewage oxidation ponds (less than acre 6 feet deep)	1 gallon (3,785.5 ml) per acre

* Apply diluted with water in total volume of 5 gallons/acre by pouring or spraying over the surface to be treated with pre-calibrated device. Repeat application as needed after 2-4 weeks. Control of *Chironomine* midges may take up to 2 weeks.

9.0 CHEMIGATION

Apply this product through flood (basin) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have any questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

A person knowledgeable of this chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

CONTINUED

9.1 RICE-FLOOD (BASIN) CHEMIGATION

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

VectoBac 12AS is metered or dripped into rice floodwater at application stations positioned at the point of introduction (levee cut) of water into each rice field or pan. Two to three pints of VectoBac 12AS are diluted in water to a final volume of 5 gallons. The diluted solution is contained in a 5 gallon container and metered or dispersed into the irrigation water using a constant flow device at the rate of 80 ml per minute. Introduction of the solution should begin when 1/3 to 1/2 of the pan or field is covered with floodwater. Delivery of the solution should continue for a period of approximately 4-1/2 hours. Floodwater depth should not exceed 10-12 inches to prevent excessive dilution of VectoBac 12AS which could result in reduced larval kill.

Agitation is not required during the period in which the VectoBac 12AS solution is being dispersed.

Application of VectoBac 12AS into rice floodwater is not permitted using a pressurized water and pesticide injection system.

10.0 SMALL QUANTITY DILUTION RATES

Gallons Spray Solution/Acre
(Ounces Needed per Gallon of Spray)

VectoBac 12AS
Rate in Pints

Per Acre	10 Gal/A	25 Gal/A	50 Gal/A
0.25 (4 oz)	0.4	0.16	0.08
0.5 (8 oz)	0.8	0.32	0.16
1.0 (16 oz)	1.6	0.64	0.32
2.0 (32 oz)	3.2	1.28	0.64

11.0 NOTICE TO USER

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE CONCERNING USE OF THIS PRODUCT OTHER THAN AS INDICATED ON THE LABEL. USER ASSUMES ALL RISKS OF USE, STORAGE OR HANDLING NOT IN STRICT ACCORDANCE WITH ACCOMPANYING DIRECTIONS.

VectoBac® 12AS
MSDS# BIO-0031 Rev. 2 ISSUED 12/16/03

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME: VectoBac® 12AS Biological Larvicide

EPA REG. NO.: 73049-38
List Number: 5605
Code Number: 15576, 15577, 21894

MANUFACTURER: Valent BioSciences Corporation
870 Technology Way, Suite 100
Libertyville, Illinois 60048

EMERGENCY TELEPHONE NUMBERS
Emergency Health or Spill:
Outside the United States: 651-632-6184
Within the United States: 877-315-9819

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME: Bacillus thuringiensis, subsp. israelensis
CONCENTRATION: 11.61 %
CAS NUMBER: 68038-71-1

OSHA-PEL	8HR TWA:	N/L
	STEL:	N/L
	CEILING:	N/L
ACGIH-TLV	8HR TWA:	N/L
	STEL:	N/L
	CEILING:	N/L
OTHER LIMITS	8HR TWA:	N/A
	STEL:	N/A
	CEILING:	N/A

INGREDIENT NAME: Inert Ingredients - identity withheld as a Trade Secret
CONCENTRATION: 88.39 %
CAS NUMBER: N/A

OSHA-PEL	8HR TWA:	N/L
	STEL:	N/L
	CEILING:	N/L
ACGIH-TLV	8HR TWA:	N/L
	STEL:	N/L
	CEILING:	N/L
OTHER LIMITS	8HR TWA:	N/A
	STEL:	N/A
	CEILING:	N/A

3. HAZARDS INFORMATION

EMERGENCY OVERVIEW: Product is non-toxic by ingestion, skin contact, or inhalation. May be irritating to skin and eyes, and may be a skin sensitizer.

ROUTE(S) OF ENTRY: Skin: No
Inhalation: No
Ingestion: No

SKIN CONTACT: Mild irritant

SKIN SENSITIZATION: Possible mild sensitizer

EYE CONTACT: Mild irritant

TARGET ORGANS: N/D

CARCINOGENICITY RATING: NTP: N/L IARC: N/L OSHA: N/L ACGIH: N/L
None

SIGNS AND SYMPTOMS: Direct contact with eyes or skin may cause mild irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: N/D

4. FIRST AID MEASURES

EYES: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

SKIN: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INGESTION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

INHALATION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Provide symptomatic/supportive care as necessary.

5. FIRE FIGHTING PROCEDURES

FLASH POINT: N/A (Aqueous suspension)
FLASH POINT METHOD: N/A
LOWER EXPLOSIVE LIMIT(%): N/A
UPPER EXPLOSIVE LIMIT(%): N/A
AUTOIGNITION TEMPERATURE: N/A

FIRE & EXPLOSION HAZARDS: Non-flammable and no explosive properties.

EXTINGUISHING MEDIA: Use appropriate media for underlying cause of fire.

FIRE FIGHTING INSTRUCTIONS: Wear protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE PROCEDURES: Recover product and place in appropriate container for disposal. Ventilate and wash area.

7. HANDLING AND STORAGE

HANDLING: N/D.

STORAGE: Store in a cool (59-86° F or 15-30° C), dry place.

SPECIAL PRECAUTIONS: Wash thoroughly with soap and water after handling. Keep impervious gloves on until all potentially contaminated personal protective equipment is removed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust.

RESPIRATORY PROTECTION: Not usually required. If necessary (Mixers/loaders and applicators not in enclosed cabs or aircraft), use a MSHA/NIOSH approved (or equivalent) respirator with a dust/mist filter (N-95, R-95, or P95).

SKIN PROTECTION: Impervious, waterproof gloves and clothing to minimize skin contact.

EYE PROTECTION: Not usually required. If necessary, use safety glasses or goggles.

OTHER PROTECTION: Wash thoroughly with soap and water after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Light brown aqueous suspension.
ODOR: Typical fermentation (malt) odor.
BOILING POINT: Approx. 100° C
MELTING/FREEZING POINT: Approx. 0° C
VAPOR PRESSURE (mm Hg): N/D
VAPOR DENSITY (Air=1): N/D
EVAPORATION RATE: N/D
BULK DENSITY: 1.06-1.1 g/mL
SPECIFIC GRAVITY: N/D
SOLUBILITY: Disperses well in water
pH: 4.6-5.0
VISCOSITY: 250-1000 cps at 25 C

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

INCOMPATIBILITIES: Diluted or undiluted product can cause corrosion if left in prolonged contact with aluminum surfaces (e.g. spray equipment, aircraft components).

HAZARDOUS DECOMPOSITION PRODUCTS: N/D.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

ORAL LD50: > 5,000 mg/kg (rat)

DERMAL LD50: > 5,000 mg/kg (rabbit)

INHALATION LC50: > 5.34 mg/l (rat) No lethality was observed in rats after a 4 hour whole body exposure to this concentration of the product as an undiluted aerosol.

CORROSIVENESS: N/D. Not expected to have any corrosive properties.

DERMAL IRRITATION: Transient, mild to moderate redness was observed at the site of application in a skin irritation test in rabbits.

OCULAR IRRITATION: Transient, redness and conjunctival irritation observed in test animals in a study with this product. No positive ocular effects were observed.

DERMAL SENSITIZATION: Eight of ten animals positive in a dermal sensitization study in guinea pigs. Considered to be a mild sensitizer.

SPECIAL TARGET ORGAN EFFECTS: N/D.

CARCINOGENICITY INFORMATION: N/D. None of the components are classified as carcinogens.

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/D

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS: Dispose of product in accordance with federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

DOT STATUS: Not Regulated
PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
UN NUMBER: N/A
PACKING GROUP: N/A
REPORTABLE QUANTITY: N/A

IATA/ICAO STATUS: Not Regulated
PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
UN NUMBER: N/A
PACKING GROUP: N/A
REPORTABLE QUANTITY: N/A

IMO STATUS: Not Regulated
PROPER SHIPPING NAME: N/A
HAZARD CLASS: N/A
UN NUMBER: N/A
PACKING GROUP: N/A
REPORTABLE QUANTITY: N/A
FLASH POINT: N/D

15. REGULATORY INFORMATION

TSCA STATUS: Exempt RCRA STATUS: N/D

CERCLA STATUS: N/D PROP 65 (CA): N/D

SARA STATUS: N/D

16. OTHER INFORMATION

REASON FOR ISSUE: Updated Composition Information (Section 2) and Phys/Chem. Properties (Section 9).
APPROVAL DATE: 12/16/03
SUPERSEDES DATE: 07/03/03

LEGEND: N/A = Not Applicable
N/D = Not Determined
N/L = Not Listed
L = Listed
C = Ceiling
S = Short-term
® = Registered Trademark of Valent BioSciences
(TM) = Registered Trademark of Valent BioSciences

The information and recommendations contained herein are based upon tests believed to be reliable. However, Valent BioSciences does not guarantee their accuracy or completeness nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of the goods, the merchantability of the goods, or the fitness of the goods for a particular purpose. Adjustment to conform with actual conditions of usage may be required. Valent BioSciences assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of these data. No freedom from infringement of any patent, copyright or trademark is to be inferred.

Altosid®
BRIQUETS

A SUSTAINED RELEASE MOSQUITO GROWTH REGULATOR TO PREVENT ADULT MOSQUITO EMERGENCE
(INCLUDING THOSE WHICH MAY TRANSMIT WEST NILE VIRUS)

SPECIMEN LABEL

ACTIVE INGREDIENT:

S-Methoprene (CAS #65733-16-6) (Dry Weight Basis)	8.62%
OTHER INGREDIENTS:	91.38%
Total	100.00%

This product contains water, therefore the weight of the briquet and percent by weight of active ingredient will vary with hydration. The Ingredient Statement is expressed on a dry weight basis.

EPA Reg No. 2724-375
EPA Est. No. 2724-TX-1

KEEP OUT OF REACH OF CHILDREN
CAUTION

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

FIRST AID	
Call a poison control center or doctor for treatment advice.	
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-248-7763 for emergency medical treatment information.	

ENVIRONMENTAL HAZARDS

Do not contaminate water when disposing of unused product.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Note to User: Do not remove **ALTOSID® Briquets** from container except for immediate use.

Because of the unique mode of action of **ALTOSID Briquets**, users must be familiar with special techniques for accurate evaluation of treatments. See Application Rates and Intervals section of this label or consult local Mosquito Abatement Agency. Effective use of **ALTOSID Briquets** in sites subjected to periodic heavy flow of water requires careful attention to briquet placement and to the possible need for retreatment. Use of the product in storm drains, waste treatment and settling ponds, and similar systems should therefore be limited to experienced pesticide applicators, such as personnel of Mosquito Abatement Districts and Public Health Agencies.

Introduction: The **ALTOSID Briquet** is a formulation designed to release effective levels of **ALTOSID®** Insect Growth Regulator up to 30 days under typical environmental conditions. Release of **ALTOSID** Insect Growth Regulator is effected by dissolution of the **ALTOSID Briquet**. If briquets become covered by obstructions such as debris, vegetation, and loose sediment as a result of high rainfall or flow, normal

dispersion of the active ingredient can be inhibited. Water flow may increase the dissolution of the briquet thus reducing the residual life of the briquet. Inspect areas of water flow to determine appropriate retreatment intervals. To assure positive results, place **ALTOSID Briquets** where they will not be swept away by flushing action. **ALTOSID Briquets** prevent the emergence of adult mosquitoes including Anopheles, *Culex, Culiseta, Coquillettidia,* and *Mansonia* spp., as well as those of the floodwater mosquito complex (*Aedes, Ochlerotatus,* and *Psorophora* spp.) from treated water. Treated larvae continue to develop normally to the pupal stage where they die.

APPLICATION TIMING

Apply **ALTOSID Briquets** at the beginning of the mosquito season. **ALTOSID Briquets** provide up to 30 days residual control. Continue treatment through the last brood of the season. Apply at any stage of larval development. **ALTOSID Briquets** may be applied as a pre-flood treatment prior to wetting events. **ALTOSID Briquets** will be unaffected in dry down situations and will begin working again during subsequent wetting events until the briquet is exhausted.

NOTE: This insect growth regulator has no effect on mosquitoes which have reached the pupal or adult stage prior to treatment.

APPLICATION SITES

ALTOSID Briquets are designed to control mosquitoes in small bodies of water. Examples of application sites are: storm drains, catch basins, roadside ditches, fish ponds, ornamental ponds and fountains, other artificial water-holding containers, animal watering troughs, cesspools and septic tanks, waste treatment and settling ponds, flooded crypts, transformer vaults, abandoned swimming pools, tires, construction and other manmade depressions, cattail marshes, water-hyacinth beds, vegetation-choked phosphate pits, pastures, meadows, rice fields, freshwater swamps and marshes, salt and tidal marshes, treeholes, woodland pools, floodplains, and dredging spoil sites. For application sites connected by a water system, i.e., storm drains or catch basins, treat all of the water holding sites in the system to maximize the efficiency of the treatment program.

APPLICATION RATES AND INTERVALS

For mosquito control in non-(or low-) flow, shallow depressions (up to two ft in depth), treat on the basis of surface area placing one **ALTOSID Briquet** per 100 sq ft. For applications in storm water drainage areas, sewers, and catch basins: Place one **ALTOSID Briquet** into each catch basin. Follow the chart below to determine the number of **ALTOSID Briquets** to use in large catch basins. Place one **ALTOSID Briquet** per 100 sq ft of surface area up to two feet deep for storm water drainage areas. Use one additional **ALTOSID Briquet** per two feet of water depth in areas deeper than two feet.

ALTOSID BRIQUET APPLICATION CHART

Number of Briquets	Catch Basin Size	Water Depth (Feet)
1	0–1,500	0–2
2	1,500–3,000	2–4
3	3,000–4,500	4–6
4	4,500–6,000	6–8

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. **Storage:** Store in cool, dry place. **Pesticide Disposal:** Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility. **Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Always read the label before using this product.

For more information call **1-800-248-7763** or visit our web site: **www.altosid.com**

Wellmark

ZOËCON Professional Products

Wellmark International
Schaumburg, Illinois U.S.A.

April, 2005
Schaumburg, IL

25-24-035

Made in the U.S.A.

Date Issued: November, 2004
Supersedes: November, 2003

MATERIAL SAFETY DATA SHEET
ZOECON ALTOSID® BRIQUETS

Manufacturer: Wellmark International

Address: 1501 E. Woodfield Rd., Suite 200 West, Schaumburg, IL 60173

Emergency Phone: 1-800-248-7763

Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Zoecon Altosid® Briquets

Chemical Name/Synonym: S)-Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate

Chemical Family: Terpenoid

Formula: C19 H34 O3

EPA Registration No.: 2724-375-

RF Number: 433A

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component (chemical, common name)	CAS Number	Weight	Tolerance
(S)-Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate	65733-16-6	8.62%	Not established
Inert ingredients (non-hazardous and/or trade secret):		91.38%	

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT
Caution: Keep out of the reach of children..

SIGNS AND SYMPTOMS OF OVEREXPOSURE

No adverse reactions have resulted from normal human exposure during research and testing. Adverse animal reactions to this product have not been shown.

PRIMARY ROUTE OF ENTRY **Dermal/Eye:** Yes **Oral:** Yes **Inhalation:** Yes

ACUTE TOXICITY

Oral: LD50 (rat): > 34,600 mg/kg bw (highest dose level tested) (Based on S-Methoprene)

Dermal: LD50 (rabbit) >5,000 mg/kg bw) (Based on S-Methoprene)

Inhalation: LC50 (rat): >5.19 mg/L air (Based on S-Methoprene)

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Non-irritating (rabbit) (Based on S-Methoprene)

Eye Irritation: Practically non-irritating (rabbit) (Based on S-Methoprene)

Sensitizer: Not a sensitizer(guinea pig) (Based on S-Methoprene)

4. FIRST AID MEASURES

Eye:	Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.
Skin:	Wash material off with soap and water. Remove contaminated clothing and footwear. See a physician if symptoms persist.
Ingestion:	Drink 1-2 glasses of water and try to induce vomiting. Seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation:	Remove victim to fresh air. See a physician if cough or other respiratory symptoms develop
Note to Physician:	Treat symptomatically

5. FIRE FIGHTING MEASURES

NFPA Rating:	**Health: 0** **Fire: 0** **Reactivity: 0**
Flammability Class:	N/A
Flash Point:	Does not flash
Explosive Limits (% of Volume):	N/A
Extinguishing Media:	Water, foam, dry chemical
Special Protective Equipment:	Firefighters should wear protective clothing, eye protection, and self contained breathing apparatus.
Fire Fighting Procedures:	Normal procedures. Do not allow run-off to enter waterways inhabited by aquatic organisms
Combustion Products:	Carbon dioxide, carbon monoxide
Unusual Fire/Explosion Hazards:	None

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken:	Sweep up material and place in a container for disposal. Do not allow spill to enter waterways inhabited by aquatic organisms
Absorbents:	None necessary due to product form
Incompatibles:	None

7. HANDLING AND STORAGE

Handling:	Avoid contact with eyes or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling.
Storage:	Store in a cool, dry place. Do not contaminate food or feed by storage or disposal. Keep away from children.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits:	Not applicable
Ventilation:	Use with adequate ventilation.
Personal Protective Equipment:	Under ordinary use conditions, no special protection is required. If prolonged exposure is expected, it is recommended to wear a MSHA/NIOSH approved organic vapor/pesticide respirator, impervious gloves, chemical goggles or safety glasses with side shields.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Grey to black solid with slight hydrocarbon odor.
Boiling Point:	N/A
Melting Point:	N/A
Vapor Pressure (mm Hg):	N/A
Vapor Density (Air = 1):	N/A
Specific Gravity:	1.4 g/cc
Bulk Density:	N/A
Solubility:	1 ppm
Evaporation Rate:	N/A
pH:	N/A

10. STABILITY AND REACTIVITY

Stability:	Stable
Reactivity:	Non-reactive
Incompatibility w/ Other Materials:	None
Decomposition Products:	None
Hazardous Polymerization:	Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Based on (RS)-Methoprene Technical]
Methoprene is not considered as a carcinogen. The NOEL for non-carcinogen effects in an 18-month mouse study was 250ppm.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Based on (RS)-Methoprene Technical]
Methoprene is not a teratogen. The NOEL for maternal and embryo toxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm.

MUTAGENICITY [Based on (RS)-Methoprene Technical]
Methoprene is not a mutagen.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Based on (RS)-Methoprene Technical]

Hydrolysis:	T1/2 > 4 weeks
Photolysis:	T1/2 < 10 hours
Soil half life:	~ 10 days
Water solubility:	< 2 ppm

ECOTOXICITY [Based on (S)-Methoprene Technical]

Acute Toxicity: fish:LC50 (trout): 760 ppb, (bluegill): > 370 ppb ((S)-Methoprene); **aquatic invertebrates:**LC50 (Daphnia): 360 ppb ((S)-Methoprene.)

13. DISPOSAL CONSIDERATIONS

Wastes resulting from the use of this product may be disposed of on site or at an approved waste management facility. Triple rinse (or equivalent). Do not contaminate water when disposing of rinsate or equipment wash waters. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT49CFR Description: Not regulated as hazardous by D.O.T.

Freight Classification: Insecticides, NOI other than poison in boxes or drums. NMFC 102120

15. REGULATORY INFORMATION

CERCLA (Superfund): Not regulated

RCRA: Not regulated as hazardous

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritation)

Delayed Health: No

Fire: No

Sudden Pressure: No

Reactivity: No

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.

25 24 041

ANVIL® 10+10 ULV

CLARKE

Contains An Oil Soluble Synergized Synthetic Pyrethroid For Control of Adult Mosquitoes (Including Organophosphate-Resistant Species) In Outdoor Residential and Recreational Areas.

Precautionary Statements
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if absorbed through the skin. Avoid contact with skin, eyes or clothing. In case of contact, flush with plenty of water. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish. Do not apply over permanent bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material beyond the body of water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment rinsate or wash waters.

This product is toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply to blooming crops or weeds when bees are actively visiting the treatment area, except when applications are made to prevent or control a threat to public and/or animal health determined by a state, tribal or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

For use only by federal, state, tribal or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control applications, or by persons under their direct supervision.

E.P.A. EST. No. 1021-MN-2
EPA Reg. No. 1021-1686-8329
NET CONTENTS

LOT NO.

ACTIVE INGREDIENTS:	
3-Phenoxybenzyl-(1RS, 3RS; 1RS, 3SR)-2,2-dimethyl-3-(2-methylprop-1-enyl) cyclopropanecarboxylate..	10.00%
* Piperonyl Butoxide, Technical.....	10.00%
** OTHER INGREDIENTS	80.00%
	100.00%

* Equivalent to 8.00% (butylcarbityl) (6-propylpiperonyl) ether and 2.00% related compounds

** Contains a petroleum distillate

Contains 0.74 pounds of Technical SUMITHRIN®/Gallon and 0.74 pounds Technical Piperonyl Butoxide/Gallon

SUMITHRIN®- Registered trademark of Sumitomo Chemical Company, Ltd.

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUCIONAL USUARIO: Si usted no lee Ingles, no use este producto hasta que la etiqueta haya sido explicado ampliamente.

FIRST AID

IF SWALLOWED • Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person

IF ON SKIN OR CLOTHING: • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: Contains a petroleum distillate – vomiting may cause aspiration pneumonia.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information regarding medical emergencies or pesticide incidents, call the International Poison Center at 1-888-740-8712.

MANUFACTURED FOR
CLARKE MOSQUITO CONTROL PRODUCTS, INC.
159 N. GARDEN AVENUE • ROSELLE, ILLINOIS 60172

Before making the first application in a season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other requirements exist.

IN CALIFORNIA: This product is to be applied by County Health Department, State Department of Health Services, Mosquito and Vector Control or Mosquito Abatement District personnel only.

USE AREAS: For use in mosquito adulticiding programs involving outdoor residential and recreational areas where adult mosquitoes are present in annoying numbers in vegetation surrounding parks, woodlands, swamps, marshes, overgrown areas and golf courses.

For best results, apply when mosquitoes are most active and weather conditions are conducive to keeping the fog close to the ground. i.e. cool temperatures and wind speed not greater than 10 mph.

Do not treat a site with more than 0.0036 pounds of Sumithrin® per acre in a 24-hour period. Do not exceed 1.0 pounds of Sumithrin® per acre in any site in any year. More frequent applications may be made to prevent or control a threat to public and/or animal health determined by a state, tribal, or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

Note: ANVIL 10+10 ULV can not be diluted in water. Dilute this product with light mineral oil if dilution is preferred.

SPRAY DROPLET SIZE DETERMINATION

Ground Equipment: Spray equipment must be adjusted so that the volume median diameter (VMD) is 8 to 30 microns ($8 \leq Dv\ 0.5 \leq 30$ um) and that 90% of the spray is contained in droplets smaller than 50 microns (Dv 0.9 < 50 um). Directions from the equipment manufacturer or vendor, pesticide registrant or a test facility using a laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

Aerial Equipment: Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns (Dv < 60 um) and that 90% of the spray is contained in droplets smaller than 100 microns (Dv 0.9 < 100 um). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

GROUND ULV APPLICATION

Apply ANVIL 10+10 ULV through a standard ULV cold aerosol or non-thermal aerosol (cold fog) generator. Consult the following table for examples of various dosage rates using a swath width of 300 feet for acreage calculations.

Dosage Rate		Flow Rates in fluid oz./minute at truck speeds of:			
Lbs Sumithrin®/acre	Fl. oz. ANVIL 10+10 ULV per Acre	5MPH	10MPH	15MPH	20MPH
0.0036	0.62	1.9 oz.	3.8 oz	5.7 oz	7.6 oz
0.0024	0.42	1.3 oz	2.5 oz	3.8 oz	5.1 oz
0.0012	0.21	0.6 oz	1.3 oz	1.9 oz	2.5 oz

ANVIL 10 + 10 ULV may be applied undiluted with a non-thermal ULV portable "backpack" spray unit capable of delivering particles in the 5 to 25 micron range. Apply at a walking speed of 2 mph, making sure that the same amount of A.I. is applied per acre.

ANVIL 10 + 10 ULV may be applied with suitable thermal fogging equipment. Do not exceed the maximum rates listed above. May be applied at speeds of 5 to 20 mph.

AERIAL APPLICATION

Prohibition on aerial use: Not for aerial application in Florida unless specifically authorized by the Bureau of Entomology, Florida Department of Agriculture and Consumer Service.

ANVIL 10+10 ULV may be applied at rates of 0.21 to 0.62 fluid ounces of ANVIL 10+10 ULV per acre by fixed wing or rotary aircraft equipped with suitable ULV application equipment. ANVIL 10+10 ULV may also be diluted with a suitable solvent such as mineral oil and applied by aerial ULV equipment so long as 0.62 fluid ounces per acre of ANVIL 10+10 ULV is not exceeded. Aerial application should be made at an altitude below 300 feet. Do not apply when ground wind speeds exceed 10 mph.

Dosage Rate	Flow Rates in fluid oz./acre
Lbs Sumithrin®/acre	ANVIL® 10 + 10 ULV
0.0036	.62 oz
0.0024	.42 oz
0.0012	.21 oz

STORAGE & DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Store in a cool, dry place. Keep container closed.

CONTAINER DISPOSAL: Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other approved state and local procedures.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

FOR MORE INFORMATION CALL:
1-800-323-5727

AL0001

Material Safety Data Sheet

Date last revised: 15 December 2005

I. General Information

Chemical Name and Synonyms Sumithrin Piperonyl Butoxide	**Trade Name & Synonyms** Anvil 10+10 ULV
Chemical Family Synergized Synthetic Pyrethroid	**EPA Registration Number** 1021-1688-8329
Proper DOT Shipping Name Environmentally Hazardous Substances, Liquid, N.O.S., Marine Pollutant (d-Phenothrin) [bulk only]	**DOT Hazard Classification** Class 9, UN 3082 [bulk only]
Manufacturer Clarke Mosquito Control Products, Inc.	**Manufacturer's Phone Number** (630) 894-2000
Manufacturer's Address 159 North Garden Avenue Roselle, Illinois 60172	**INFOTRAC (Emergency) Hotline** 1-800-535-5053

II. Ingredients

Principal Hazardous Components	CAS #	Percent
Sumithrin® [3-Phenoxybenzyl-(1RS, 3RS; 1RS, 3SR) 2,2-dimethyl-3-(2-methylprop-2-enyl) cyclopropane-carboxylate]	026002-80-2	10.00%
Piperonyl Butoxide [Alpha-(2-(1-butoxyethoxy)-4,5-methylenedioxy-2-propyltoluene]	000051-03-6	10.00%
Petroleum Distillates		1 – 15%
Inert Ingredients are propriety or non-hazardous. Values are not product specifications		40 –78%

III. Physical Data

Boiling Point (°F): Not Established	**Specific Gravity (H_2O = 1):** 0.884
Vapor Pressure (mm Hg.): Not Established	**Vapor Density (Air = 1):** Not Established
Solubility in Water: Emulsifiable	**pH:** Not Applicable
Appearance: Liquid, Clear with a light yellow tinge	**Odor:** Pungent aromatic, similar to smell of mothballs

IV. Fire & Explosion Hazard Data

Flash Point (Test Method: +200 °F (Tag Closed Cup)

Extinguishing Media: Foam, carbon dioxide, or dry chemical

Special Fire Fighting Procedures: Treat as an oil fire. Use a full-faced self-contained breathing apparatus along with full protective gear. Keep nearby containers and equipment cool with a water stream. Contain the run-off, if possible, for proper disposal.

V. Health Hazard Data

Exposure Limits: Not established by OSHA or ACGIH

EMERGENCY FIRST AID

Skin Contact: CAUTION. Can cause a burning sensation on more sensitive areas (face, eyes, mouth). Prolonged or repeated exposure can cause irritation and reddening of the skin, possibly progressing into dermatitis. Immediately flush affected area with large amounts of water. Remove contaminated clothing and wash affected areas with soap and water. If irritation persists, get medical attention.

Eye: CAUTION. Can cause temporary irritation, tearing, and blurred vision. Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing Call a poison control center or doctor for treatment advice.

Inhalation: CAUTION. Excessive inhalation can cause nasal and respiratory irritation. Remove affected person to fresh air. Give oxygen, if necessary. If breathing has stopped, administer artificial respiration and get medical attention immediately

Ingestion: CAUTION. Can cause stomach irritation, resulting in nausea, cramps and vomiting. Excessive ingestion can cause nervous system disorders, such as fatigue, dizziness, headaches, lack of coordination, tremors and unconsciousness. Do not induce vomiting because of aspiration pneumonia hazard. Call a physician or poison control center.

Material Safety Data Sheet

Anvil 10+10 ULV

Date last revised: 15 December, 2005

VI. Reactivity Data

Stability:	Stable
Incompatibility	Strong acidic or alkaline materials
Hazardous Decomposition Products	Not Applicable

VII. Environmental Protection Procedures

Spill Response:
Shut off ignition sources. Stop release, if possible without risk. Dike or contain release, if possible, and if immediate response can prevent further damage or danger. Isolate and control access to the release area. Take actions to reduce vapors. Absorb with appropriate absorbent. For large spills, collect product into drums, etc., via drains, pumps, etc. Absorb with appropriate absorbent. Clean spill area of residues and absorbent. Contaminated absorbent and wash water should be disposed of according to local, state and federal regulations.

Storage:
Store containers upright and closed. Store in areas that are cool, dry and well ventilated. Keep away from heat, ignition sources and strong oxidizers. Emptied contained may retain product residues.

Waste Disposal:
Do not contaminate water when disposing of equipment wash waters. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Do not mix with other waste materials.

VIII. Special Protection Information

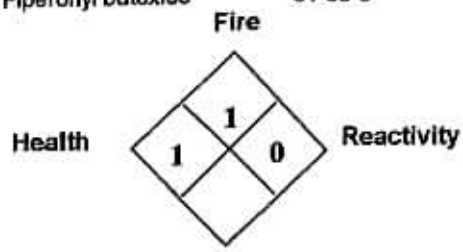
Eye Protection: OSHA-approved safety glasses, goggles or face shield	**Skin Protection:** Handlers should wear protective clothing, chemical resistant gloves, and chemical resistant apron when cleaning mixing or loading.
Respiratory Protection: Not required	**Ventilation:** Mechanical ventilation should be used when handling this product in enclosed spaces.

Other: IMPORTANT. Read and observe all precautions and instructions on the label.

IX. Additional Regulatory Information

SARA Title III Data
Section 313: (Title III Superfund Amendment and Reauthorization Act)
This product contains the following toxic chemicals subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

Ingredient	CAS Number	Percentage (by weight)
Piperonyl butoxide	51-03-6	10.0%



NFPA Code Key
4 = Severe
3 = Serious
2 = Moderate
1 = Minimal

The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.

Sevin® SL

CARBARYL INSECTICIDE

Specimen Label

FOR AGRICULTURAL OR COMMERCIAL USE ONLY

ACTIVE INGREDIENT:	
Carbaryl (1-naphthyl N-methylcarbamate)	43.0% by wt.
INERT INGREDIENTS:	57.0% by wt.
TOTAL	100.0% by wt.

(Contains 4 pounds Carbaryl Per Gallon)

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA Reg. No. 432-1227 **EPA Est. No. 264-MO-02**

IN CASE OF MEDICAL, ENVIRONMENTAL, OR TRANSPORTATION EMERGENCIES OR INJURIES, CALL 1-800-334-7577 (24 HOURS/DAY).

FOR PRODUCT INFORMATION, CALL TOLL-FREE: 1-800-331-2867

NET CONTENTS: 1, 2.5 OR 15 GALLONS

BACKED by BAYER.

MSDS Number: 000000000196

MSDS Version 2.3

SEVIN® 80WSP CARBARYL INSECTICIDE

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name	SEVIN® 80WSP CARBARYL INSECTICIDE
Chemical Name	Carbaryl
Synonym	
MSDS Number	196
Chemical Family	
Chemical Formulation	C12H11NO2
EPA Registration No.	432-1226
Canadian Registrat. No.	

Bayer Environmental Science
95 Chestnut Ridge Road
Montvale, NJ 07645
USA

For Product Use Information: (800)331-2867 Monday through Friday(CRLF) 8:00AM-4:30PM(CRLF) For Medical Emergency contact DART: (800) 334-7577 24 Hours/Day(CRLF) For Transportation Emergency CHEMTREC: (800) 424-9300 24 Hours/Day

Product Use Description FIFRA regulated use only.

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS No.	Concentration % by Weight Minimum	Maximum
CARBARYL, (1-NAPHTHYL N- METHYLCARBAMATE)	63-25-2	80.0000	
CALCIUM SILICATE	1344-95-2		
QUARTZ	14808-60-7	0.1100	
DIATOMACEOUS EARTH	61790-53-2		
Other ingredients (Trade secret)			

SECTION 3. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview	Warning! Keep out of the reach of children. Hazard to humans and domestic animals. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Harmful if gets in eyes.
Physical State	solid powder
Odor	phenolic
Appearance	off-white to pale yellow
Immediate Effects	
Eye	Do not get in eyes. Causes redness, irritation, tearing.
Skin	Harmful if absorbed through skin. Do not get on skin or clothing. May produce symptoms similar to those from ingestion.
Ingestion	May be fatal if swallowed. This product causes reversible cholinesterase inhibition. Repeated overexposure may cause more severe cholinesterase inhibition with more pronounced signs and symptoms. May lead to rapid onset of nausea, vomiting, diarrhea, abdominal pain, involuntary shaking, excess salivation, pinpoint pupils, blurred vision, profuse sweating, temporary paralysis, respiratory depression, and convulsions.
Inhalation	Harmful if inhaled. Do not breathe vapors, dusts or spray mists. May produce symptoms similar to those from ingestion.
Chronic or Delayed Long-Term	This product contains ingredients that are considered to be probable or suspected human carcinogens (See Section 11 - Chronic).
Medical Conditions Aggravated by Exposure	Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.
Signs and Symptoms	Overexposure may cause salivation, watery eyes, pinpoint eye pupils, blurred vision, muscle tremors, difficult breathing, excessive sweating, abdominal cramps, nausea, vomiting, diarrhea, weakness, headache. In severe cases convulsion, unconsciousness and respiratory failure may occur. Signs and symptoms occur rapidly following overexposure to this product.

SECTION 4. FIRST AID MEASURES

Eye	Flush eyes with plenty of water. Seek medical attention if irritation develops or persists.

Skin	Wash skin thoroughly with soap and water.
Ingestion	Never give anything by mouth to an unconscious or convulsing person. If conscious and not convulsing, drink 1 to 2 glasses of water and induce vomiting by touching the back of the throat with finger. Get medical attention.
Inhalation	Remove victim from contaminated atmosphere. Call a physician.
Note to Physician	Contact a physician immediately in all cases of suspected poisoning. Transport to a physician or hospital immediately and show a copy of this label to the physician. If poisoning is suspected in animals, contact a veterinarian. Treat symptomatically. Overexposure to materials other than this product may have occurred. This product contains a methyl carbamate insecticide, which is a chloinesterase inhibitor. Overexposure to this substance may cause toxic signs and symptoms due to stimulation of the cholinergic nervous system. These effects of overexposure are spontaneously and rapidly reversible. Gastric lavage may be used if this product has been swallowed. Poisoning may occur rapidly after ingestion and prompt removal of stomach contents is indicated. Specific treatment consists of parenteral atropine sulfate. Caution should be maintained to prevent overatropinization. Improve tissue oxygenation as much as possible before administering atropine to minimize the risk of ventricular fibrillation. Mild cases may be given 1 to 2 mg intramuscularly every 10 minutes until full atropinization has been achieved and repeated thereafter whenever symptoms reappear. Severe cases should be given 2 to 4 mg intravenously every 10 minutes until fully atropinized, then intramuscularly every 30 to 60 minutes as needed to maintain the effect for at least 12 hours. Dosages for children should be appropriately reduced. Complete recovery from overexposure is to be expected within 24 hours. Narcotics and other sedative should not be used. Further, drugs like 2-PAM (pyridine-2-aldoxime methiodide) are NOT recommended. To aid in confirmation of a diagnosis, urine samples should be obtained within 24 hours of exposure and immediately frozen. Analysis will be arranged by Bayer.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point	Not applicable
Fire and Explosion Hazards	Like all organic and most dry chemicals, as a powder or dust, this product (when mixed with air in critical proportions and in the presence of an ignition source) may present an explosion hazard.
Suitable Extinguishing Media	Small Fires:, carbon dioxide (CO2), dry chemical

Large Fires:, alcohol foam, polymer foam, water spray

Fire Fighting Instructions

Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Keep unnecessary people away, isolate hazard area and deny entry. Evacuate residents who are downwind of fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Persons who may have been exposed to contaminated smoke should be immediately examined by a physician and checked for symptoms of poisoning. The symptoms should not be mistaken for heat exhaustion or smoke inhalation.

SECTION 6. ACCIDENTAL RELEASE MEASURES

General and Disposal

Evacuation Procedures and Safety: Wear appropriate gear for the situation. See Personal Protection information in Section 8.

Cleanup and Disposal of Spill: Shovel up into an appropriate closed container (see Section 7: Handling and Storage). Clean up residual material by washing area with water. Decontaminate tools and equipment following cleanup. Avoid creation of dusty conditions.

Land Spill or Leaks

Containment of Spill: Follow procedure under Cleanup and Disposal of Spill.

Environmental and Regulatory Reporting: If spilled on the ground, the affected area should be scraped clean and placed in an appropriate container for disposal. Runoff from fire control or dilution water may cause pollution. Prevent material from entering public sewer system or any waterway. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

SECTION 7. HANDLING AND STORAGE

Handling Procedures

Avoid direct or prolonged contact with skin and eyes. Avoid breathing dusts. Do not ingest.

Storing Procedures

Store in original container. Keep in a dry, cool place. Keep out of reach of children and domestic animals.

Work/Hygienic Procedures

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining Personal Protective

Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Min/Max Storage Temperatures 0 °C / 38 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls When handlers used closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CFR 170.240(d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

Eye/Face Protection Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriaate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles. An emergency eye wash must be readily accessible to the work area.

Body Protection Applicators and other handlers must wear: Long-sleeved shirt and long pants waterproof gloves shoes plus socks Chemical resistant headgear for overhead exposure

Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected with regard for use conditions and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Respiratory Protection When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Under normal conditions, in the absence of other airborne contaminants, the

following devices should provide protection from this material up tothe conditions specified by the appropriate OSHA, WHMIS or ANSI standard(s): Air-purifying (half-mask/full-face) respirator with cartridges/canister approved for use against pesticides.

Under conditions immediately dangerous to life or health, or emergency conditions with unknown concentrations, use a full-face positive pressure air-supplied respirator equipped with an emergency escape airsupply unit or use a self-contained breathing apparatus unit.

General Protection

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Wastie resulting from these procedures should be handled inaccordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Limits

CARBARYL, (1-NAPHTHYL N-METHYLCARBAMATE)	63-25-2	ACGIH	TWA		5 mg/m3
		NIOSH	REL		5 mg/m3
		OSHA Z1	PEL		5 mg/m3
		OSHA Z1A	TWA		5 mg/m3
		US CA OEL	TWA PEL		5 mg/m3
CALCIUM SILICATE	1344-95-2	ACGIH	TWA		10 mg/m3
		Remarks		The value is for particulate matter containing no asbestos and <1% crystalline silica.	
		NIOSH	REL		5 mg/m3
		Form of Exposure		Respirable.	
		NIOSH	REL		10 mg/m3
		Form of Exposure		Total	
		OSHA Z1	PEL		5 mg/m3
		Form of Exposure		Respirable fraction.	
		OSHA Z1	PEL		15 mg/m3
		Form of Exposure		Total dust.	
		OSHA Z1A	TWA		5 mg/m3
		Form of Exposure		Respirable fraction.	
		OSHA Z1A	TWA		15 mg/m3
		Form of Exposure		Total dust.	
		US CA OEL	TWA PEL		5 mg/m3
		Form of Exposure		Respirable fraction.	
		US CA OEL	TWA PEL		10 mg/m3

		Form of Exposure	Total dust.	
QUARTZ	14808-60-7	NIOSH REL		0.05 mg/m3
		Form of Exposure	Respirable dust.	
		OSHA Z1A TWA		0.1 mg/m3
		Form of Exposure	Respirable dust.	
		US CA OEL TWA PEL		0.1 mg/m3
		Form of Exposure	Respirable dust.	
		US CA OEL TWA PEL		0.3 mg/m3
		Form of Exposure	Total dust.	
		ACGIH TWA		0.05 mg/m3
DIATOMACEOUS EARTH	61790-53-2	OSHA Z1A TWA		6 mg/m3
		US CA OEL TWA PEL		3 mg/m3
		Form of Exposure	Respirable dust.	
		US CA OEL TWA PEL		6 mg/m3
		Form of Exposure	Total dust.	
		US CA OEL TWA PEL		6 mg/m3
		ACGIH TWA		10 mg/m3
		Remarks	The value is for particulate matter containing no asbestos and <1% crystalline silica.	
		ACGIH TWA		3 mg/m3
		Remarks	The value is for particulate matter containing no asbestos and <1% crystalline silica.	

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	off-white to pale yellow
Physical State	solid powder
Odor	phenolic
pH	4 - 6.5 at 10 wt/wt%.
Vapor Pressure	Not available
Vapor Density (air = 1)	Not available
Specific Gravity	Not Available
Boiling Point	Not available
Melting/Freezing Point	Not available
Solubility (in water)	dispersible

Molecular Weight	201.2 g/mol
Decomposition Temperature	140 °C
Other Information	Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability	This material is stable under normal handling and storage conditions described in Section 7.
Conditions to Avoid	extreme heat open flame extreme humidity moisture
Incompatibility	strong acids bases
Hazardous Products of Decomposition	Decomposition Type: thermal oxides of nitrogen carbon oxides methyl isocyanate (trace; no adverse effects expected)
Hazardous Polymerization (Conditions to avoid)	not applicable

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	Rat: LD50: 281 mg/kg
Acute Dermal Toxicity	Rabbit: LD50: > 2,000 mg/kg
Acute Inhalation Toxicity	No test data found for product.
	Acute Respiratory Irritation: No test data found for product.
Skin Irritation	Rabbit: Minimally Irritating
Eye Irritation	Rabbit: Slightly Irritating.
Chronic Toxicity	Carbaryl has been shown to cause tumors in laboratory animals in lifetime

feeding studies. Carbaryl, when administered by various routes, at doses toxic to the maternal animals, has been shown to produce developmental toxicity in a number of species. Carbaryl produces no teratogenic effect in the absence of maternal toxicity.

Assessment Carcinogenicity

ACGIH		
CARBARYL, (1-NAPHTHYL N-METHYLCARBAMATE)	63-25-2	Group A4
CALCIUM SILICATE	1344-95-2	Group A4
QUARTZ	14808-60-7	Group A2
NTP		
QUARTZ	14808-60-7	
IARC		
CARBARYL, (1-NAPHTHYL N-METHYLCARBAMATE)	63-25-2	3
OSHA		
None		

SECTION 12. ECOLOGICAL INFORMATION

Acute and Prolonged Toxicity to Fish

The following data is based on the technical grade active ingredient(s) (TGAI).
Rainbow trout
LC50: 1950 ug/l
Exposure Time: 96 h

The following data is based on the technical grade active ingredient(s) (TGAI).
Bluegill sunfish
LC50: 6760 ug/l
Exposure Time: 96 h

Toxicity Other Non Mammal Terr. Species

The following data is based on the technical grade active ingredient(s) (TGAI).
Mallard duck
LC50: > 5,000 mg/kg
Exposure Time: 8 d
Dietary concentrations.

The following data is based on the technical grade active ingredient(s) (TGAI).
Bobwhite quail
LC50: > 5,000 mg/kg
Exposure Time: 8 d
Dietary concentrations.

Environmental Precautions

This product is toxic to aquatic and estuarine invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below mean high water mark. Discharge for rice fields may kill aquatic and estuarine invertebrates. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of equipment wastewaters. Do not contaminate water when disposing of

equipment washwaters.

BEE CAUTION: MAY KILL HONEYBEES IN SUBSTANTIAL NUMBERS.

This product is highly toxic to bees exposed to direct treatment of residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Environmental Fate

For chemical fate data call the product information phone number listed in Section 1.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Pesticide Disposal: Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

EPA Hazardous Waste - Yes

Container Disposal

Do not reuse outer bag. Dispose of outer bag in the trash, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

RCRA Classification

63-25-2 CARBARYL, (1-NAPHTHYL N- METHYLCARBAMATE)

US. EPA Resource Conservation and Recovery Act (RCRA) U List of Hazardous Wastes (40 CFR 261.33(f) and 40 CFR 302 [CERCLA]): U279

SECTION 14. TRANSPORT INFORMATION

Transportation Status:
The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors.

US Department of Transportation
Shipping Name: NOT REGULATED

SECTION 15. REGULATORY INFORMATION

US Federal

EPA Registration No. 432-1226

TSCA list

CARBARYL, (1-NAPHTHYL N-METHYLCARBAMATE)	63-25-2
CALCIUM SILICATE	1344-95-2
QUARTZ	14808-60-7
DIATOMACEOUS EARTH	61790-53-2

TSCA 12b export notification

None

SARA Title III - section 302 - notification and information

None

SARA Title III - section 313 - toxic chemical release reporting

CARBARYL, (1-NAPHTHYL N-METHYLCARBAMATE)	63-25-2	1.0%

US States Regulatory

CA Prop65

This product contains a chemical known to the state of California to cause cancer.	QUARTZ	14808-60-7

US State right-to-know ingredients

CARBARYL, (1-NAPHTHYL N-METHYLCARBAMATE)	63-25-2	CA, CT, IL, MA, MN, NJ, PA, RI
CALCIUM SILICATE	1344-95-2	IL, MN, PA, RI
QUARTZ	14808-60-7	IL, MA, MN, PA
DIATOMACEOUS EARTH	61790-53-2	IL

Canadian Regulations

Canadian Registrat. No.

Canadian Domestic Substance List

CALCIUM SILICATE	1344-95-2
QUARTZ	14808-60-7

Environmental

CERCLA

CARBARYL, (1-NAPHTHYL N-METHYLCARBAMATE)	63-25-2	100 lbs

Clean Water Section 307 Priority Pollutants

None

Safe Drinking Water Act Maximum Contaminant Levels

None

International Regulations

EU Classification
None
European Inventory of Existing Commercial Substances (EINECS)

CARBARYL, (1-NAPHTHYL N-METHYLCARBAMATE)	63-25-2
CALCIUM SILICATE	1344-95-2
QUARTZ	14808-60-7

SECTION 16. OTHER INFORMATION

	Health	Flammability	Reactivity	Others
HMIS	2	1	1	
NFPA	3	1	1	

Reason for Revisions: Company name change.

Print Date: 02/05/2003
Supersedes MSDS, which is older than: 02/05/2003

For more information please contact:

Dan Hopkins
Pest Management Coordinator
(630) 789-7042
dhopkins@villageofhinsdale.org

Recommended websites:

www.epa.gov

www.beyondpesticides.org

www.pestcide.org

www.spcpweb.org

www.safelawns.org

DATE: January 07, 2010

REQUEST FOR BOARD ACTION

AGENDA: Environment and Public Services Committee **SECTION NUMBER**	**ORIGINATING DEPARTMENT** Police Department
ITEM Ordinance Authorizing the Sale by Auction of Personal Property owned by the Village of Hinsdale	**APPROVAL** Chief Bradley Bloom

The Village of Hinsdale has various properties known as personal property that are no longer necessary or useful to the Village and find that the best interests of the Village of Hinsdale will be served by its sale. Those items are as follows:

2001 Ford Expedition
2006 Ford Crown Victoria
2003 Ford Crown Victoria
2003 Ford Crown Victoria
2000 Chevy Silverado 1500 w/plow
1998 Ford Taurus
6 Station Chairs
Sofa
Stairmaster Step Mill 7000 PT
Hydraulic Generator 725 Amps Kw/ P.T.O.
9 Sets of Turnout Gear of various sizes
22 Safari-Land .40 Caliber Holsters

Motion: To recommend that the Village Board approve the listed property as surplus and authorizing the sale by auction of said personal property by the Village of Hinsdale.

APPROVAL	APPROVAL	APPROVAL	APPROVAL	MANAGER'S APPROVAL

COMMITTEE ACTION:

BOARD ACTION:

Village of Hinsdale
Ordinance No._____

An Ordinance Authorizing the Sale by Auction of Personal Property Owned by the Village of Hinsdale

WHEREAS, in the opinion of at least a simple majority of the corporate authorities of the Village of Hinsdale, it is no longer necessary or useful to or for the best interests of the Village of Hinsdale, to retain ownership of the personal property hereinafter described; and

WHEREAS, it has been determined by the President and Board of Trustees of the Village of Hinsdale to sell said property on the E-Bay Auction website (www.ebay.com) or another auction service approved by the Village Manager open to public auction to be held on or after the week of January 20, 2010.

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF HINSDALE:

Section One: Pursuant to 65 ILCS 5/11-76-4, the President and Board of Trustees of the Village of Hinsdale find that the personal property listed on the form attached (Exhibit A) to this Ordinance and now owned by the Village of Hinsdale, is no longer necessary or useful to the Village of Hinsdale and the best interests of the Village of Hinsdale will be served by its sale.

Section Two: Pursuant to said 65 ILCS 5/11-76-4, the Village Manager is hereby authorized and directed to sell the aforementioned personal property now owned by the Village of Hinsdale on the E-Bay Auction website (www.ebay.com) or another auction service approved by the Village Manager open to public auction, on or after Wednesday January 20, 2010, to the highest bidder on said property.

Section Three: The Village Manager is hereby authorized and may direct E-Bay or other auction services to advertise the sale of the aforementioned personal property electronically published on the Internet before the date of said public auction.

Section Four: No bid which is less than the minimum price set forth in the list of property to be sold shall be accepted except as authorized by the Village Manager or his agent.

Section Five: The Village Manager is hereby authorized and may direct E-Bay or another auction service to facilitate an agreement for the sale of said personal property. E-Bay or another auction service will charge an administrative fee, which will come out of the proceeds from the sale of surplus vehicles and equipment.

Section Six: Upon payment of the full auction price, the Village Manager is hereby authorized and directed to convey and transfer title to the aforesaid personal property, to the successful bidder.

Section Seven: This Ordinance shall be in force and effect from and after its passage, by a simple majority vote of the corporate authorities, and approval in the manner provided by law.

PASSED

AYES:

NAYS:

ABSENT:

APPROVED

_____

Village President Thomas Cauley

ATTEST:

_____

Village Clerk Christine Bruton

EXHIBIT A

INVENTORY FORM*

Municipality: Hinsdale **Contact Person: David Cook**

Phone Number : (630) 789-7013 **FAX Number: (630) 789-7015**

YEAR	MAKE	MODEL/STYLE	MILEAGE	VIN NUMBER	MINIMUM BID
2001	Ford	Expedition		1FMPU16L32LA53394	$2,000.00
2006	Ford	Crown Victoria		2FAHP71W06X139989	$4,500.00
2003	Ford	Crown Victoria 4.6L SOHC V8 (Leaking Antifreeze	79,582	2FAFP71WX3X176356	$500.00
2003	Ford	Crown Victoria 4.6L SOHC V8	88,921	2FAFP71W33X176358	$500.00
2000	Chevy	Silverado 1500 w/Plow 4.8L V8 4 Wheel Drive	50,093	1GCEK14V6YZ278047	$1,000.00
1998	Ford	Taurus 3.0L V6	95,948	1FAF52U9WG271941	$1,000.00
4		Station Chairs			$25.00/each
2		Station Chairs			No Value
1		Sofa			$50.00
1		Stairmaster Step Mill 7000 PT			No Value
1		Amps 7.5 Kw Generator Hydraulic/ P.T.O.			$200.00
9		Sets of Turnout Gear Various Sizes			No Value
22		Safari-Land .40 Caliber Holsters			$10.00/each

*This Inventory Form, the Resposne Form, and copies of titles must be returned to reserve space. Items are accepted on a first-come, first-served basis.