INACTIVE SITES RANKING SYSTEM
SUMMARY SHEET

Site Name:	King's Scooters		
Location:	501 N 3rd St, Wilmington, New Hanover Co.		34.24145ºN 77.94703ºW
ID Number:	NONCD0002884		
Ranked By:	Ginny Henderson	Date:	05/30-31/13
Reviewed By:	Sue Robbins	Date:	05/31/13

Site Description/Comments:

Former scooter store. PCE was detected in the groundwater during a real estate assessment. The source of the PCE is unknown.

Route Scores: GW = 74.49 SW = 51.21 A = 0 P = 12.50

Total Score: $\frac{((74.49)^2 + (51.21)^2 + (0)^2 + (12.50)^2)^{1/2}}{2} = \underline{45.63}$

I. GROUND WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Score
A. Route Characteristics		
1. Depth to Water Table	0 2 4 6 (8) 10	
2. Net Precipitation	0 1 (2) 3	
3. Hydraulic Conductivity	0 1 2 (3)	
4. Physical State	0 1 2 (3)	
	Total Route Characteristics Score	16
B. Containment	0 1 2 (3)	3
C. Waste Characteristics		
1. Toxicity/Persistence	0 3 6 9 12 15 (18)	
2. Hazardous Waste Quantity	0 1 2 3 4 (5) 6 7 8	
	Total Waste Characteristics Score	23

Ground Water Route of Migration Score

The Ground Water Route of Migration Score is obtained by multiplying lines A, B, and C and dividing this by 14.82 to give a score between 0 and 100.

Total Ground Water Route of Migration Score: 74.49

II. SURFACE WATER ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Score
A. Route Characteristics		
1. Facility Slope and Intervening Terrain	0 (1) 2 3	
2. 1-yr., 24-hour Rainfall	0 1 2 (3)	
3. Distance to Nearest Surface Water	0 2 (4) 6 8 10	
4. Physical State	0 1 2 (3)	
	Total Route Characteristics Score	11
B. Containment	0 1 2 (3)	3
C. Waste Characteristics		
1. Toxicity/Persistence	0 3 6 9 12 15 (18)	
2. Hazardous Waste Quantity	0 1 2 3 4 (5) 6 7 8	
	Total Waste Characteristics Score	23

Surface Water Route of Migration Score

The Surface Water Route of Migration Score is obtained by multiplying lines A, B, and C and dividing this by 14.82 to give a score between 0 and 100.

Total Surface Water Route of Migration Score: 51.21

III. AIR ROUTE WORK SHEET

Rating Factor	Assigned Value (Circle One)	Score
A. Waste Characteristics		
1. Reactivity and Incompatibility	0 1 2 3	
2. Toxicity	0 3 6 9	
3. Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	
	Total Waste Characteristics Score	0
B. Targets		
1. Population Within a 4-Mile Radius	0 9 12 15 18 21 24 27 30	
2. Distance to Sensitive Environment	0 2 4 6	
3. Land Use	0 1 2 3	
	Total Targets Score	0

Air Route of Migration Score

The Air Route of Migration Score is obtained by multiplying lines A and B and dividing this by 7.80 to give a score between 0 and 100.

Total Air Route of Migration Score: 0

IV. DIRECT CONTACT ROUTE SCORE SHEET

Rating Factor	Assigned Value (Circle One)	Score

A. Residential Population

1. Toxicity — 0 3 6 9

2. Targets

   a) High Risk Population (count x 8, max. 100) _____

   b) Total Resident Population (count x 2, max. 100) _____

   c) Sensitive Environment — 0 10 15 20 25

   Resident Target Score (lines 2a + 2b + 2c, max. 100) _____

Total Residential Population Score	0

B. Nearby Population

1. Likelihood of Exposure (matrix score) — 0.25

   a) Area of Contamination — 0 (25) 50 75 100

   b) Accessibility/ Frequency of Use — 5 25 50 (75) 100

2. Toxicity Environment — 0 3 6 (9)

3. Targets (max. 100) — 100

Total Nearby Population Score	225

Overall Population Exposure Score

The Overall Population Exposure Score is determined by adding lines A and B and dividing this by 18 to give a score between 0 and 100.

Total Population Exposure Route of Migration Score: 12.50

DOCUMENTATION RECORDS
FOR
STATE HAZARD RANKING SYSTEM

INSTRUCTIONS: Briefly summarize the information you used to assign a score to each factor and document the source of the information and/or the rationale for each score.

Facility Name:	King's Scooters
ID Number:	NONCD0002884
Location:	501 N 3rd St, Wilmington, New Hanover Co. 34.24145ºN 77.94703ºW
Date Scored:	05/30-31/13
Person Scoring:	Ginny Henderson
Factors Not Scored:	Air Route and Residential Population

Comments:

References:

1. State file.
2. North Carolina Atlas, University of NC Press, Chapel Hill, NC 1975.
3. Rainfall Frequency Atlas of the US, Technical Paper 40, US Department of Commerce, Washington, DC, 1963.
4. 2000 Census of Population and Housing: Summary Population and Housing Characteristics: North Carolina, US Department of Commerce. http://quickfacts.census.gov/qfd/.
5. Dangerous Properties of Industrial Materials, N. Irving Sax, Van Reinhold Company, Inc., 1984.
6. 40 CFR 300, Appendix A, July 1, 1988.
7. http://www.census.gov/2010census/popmap/

GROUND WATER ROUTE

A. Route Characteristics:

1. Depth to Water Table: = 8 (1)

   Contaminant in groundwater

2. Net Precipitation: = 2 (2)

   55 in – 43 in = 12 in

3. Hydraulic Conductivity of Unsaturated Zone: = 3 (1)

   Coastal Plain

4. Physical State: = 3 (1)

   Unknown

B. Containment: = 3 (1)

None

C. Waste Characteristics:

1. Toxicity/Persistence: = 18 (1,5)

   PCE

2. Hazardous Waste Quantity: = 5 (1)

   Unknown

SURFACE WATER ROUTE

A. Route Characteristics:

1. Facility Slope and Intervening Terrain: = 1 (1)

$FS = \frac{52\ ft - 50\ ft}{58\ ft} = 3.4\%$, $IT = \frac{52\ ft - 2\ ft}{1{,}312\ ft} = 3.8\%$

2. One-Year 24-hour Rainfall: = 3 (3)

3.6 in

3. Distance to Nearest Surface Water/Name: = 4 (1)

1,393 ft., Cape Fear River

4. Physical State: = 3 (1)

Unknown

B. Containment: = 3 (1)

None

C. Waste Characteristics:

1. Toxicity/Persistence: = 18 (1,5)

PCE

2. Hazardous Waste Quantity: = 5 (1)

Unknown

AIR ROUTE

A. Waste Characteristics: **NOT SCORED**

1. Reactivity and Incompatibility:

2. Toxicity:

3. Hazardous Waste Quantity:

B. Targets: **NOT SCORED**

1. Population within 4-mile Radius/Distance from Hazardous Substance:

2. Distance to Sensitive Environment:

3. Land Use:

POPULATION EXPOSURE ROUTE

A. Residential Population: **NOT SCORED**

1. Toxicity:

2. Targets:

a. High Risk Population:

b. Total Resident Population:

c. Sensitive Environment

B. Nearby Population:

1. Likelihood of Exposure Score: = 0.25

a. Area of Contamination: = 25 (1)

134 ft x 50 ft = 6,700 sq ft = 0.15 acre

b. Accessibility/Frequency of Use: = 75 (1)

No barrier to entry

2. Toxicity: = 9 (1,5)

Chromium

3. Targets: 0.1 (2,258) + 0.05 (4,578) = 454.7 ≈ 100

a. 0- ½ mile: = 2,258 (7)

b. ½ - 1 mile: = 4,578 (7)