The Bates Manufacturing Company
June 22, 1992

Report No.: J092-RP
Rev. No.: 0

141951

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Summary and Recommendation

A recommendation of a SITE EVALUATION ACCOMPLISHED is given for The Bates Manufacturing Company Site. Data collected was sufficient to evaluate the site to determine if further CERCLA remedial action is required. Reports indicate that leaking drums were stored on the ground surface and areas of stained soils in the waste storage area were noted; therefore, a release to groundwater is suspected. Groundwater is used for potable purposes by approximately 16,000 people within 4 miles of the site. The distance from the site to the nearest documented drinking water well is 0.25 mile northeast. However, based on the location of potable wells and the fact that they are blended with surface water intakes prior to distribution, there is a minimal potential for impact on human receptors. There is no direct overland surface water pathway from the site to the Musconetcong River which is located 0.2 west of the site. There is no terrestrial sensitive environment, daycare center or residence within 200 ft of the site.

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Date: 8/27/14 Initial: JL

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PA Scoresheets

Site Name: The Bates Manufacturing Co.

CERCLIS ID No.: NJD002167799

Street Address: Newburg Rd.

City/State/Zip: Hackettstown NJ 07840

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PA TABLE 1: WASTE CHARACTERISTICS (WC) SCORES

PA Table 1a: WC Scores for Single Source Sites and Formulas for Multiple Source Sites

TIER	SOURCE TYPE	SINGLE SOURCE SITES (assigned WC scores)			MULTIPLE SOURCE SITES
		WC = 18	WC = 32	WC = 100	Formula for Assigning Source WC Values
TOXICITY	N/A	≤100 lb	>100 to 10,000 lb	>10,000 lb	lb ÷ 1
MOBILITY	N/A	≤500,000 lb	>500,000 to 50 million lb	>50 million lb	lb ÷ 5,000
VOLUME	Landfill	≤6.75 million ft³ ≤250,000 yd³	>6.75 million to 675 million ft³ >250,000 to 25 million yd³	>675 million ft³ >25 million yd³	ft³ ÷ 67,500 yd³ ÷ 2,500
	Surface impoundment	≤6,750 ft³ ≤250 yd³	>6,750 to 675,000 ft³ >250 to 25,000 yd³	>675,000 ft³ >25,000 yd³	ft³ ÷ 67.5 yd³ ÷ 2.5
	Drums	≤1,000 drums	>1,000 to 100,000 drums	>100,000 drums	drums ÷ 10
	Tanks and non-drum containers	≤50,000 gallons	>50,000 to 5 million gallons	>5 million gallons	gallons ÷ 500
	Contaminated soil	≤6.75 million ft³ ≤250,000 yd³	>6.75 million to 675 million ft³ >250,000 to 25 million yd³	>675 million ft³ >25 million yd³	ft³ ÷ 67,500 yd³ ÷ 2,500
	Pile	≤6,750 ft³ ≤250 yd³	>6,750 to 675,000 ft³ >250 to 25,000 yd³	>675,000 ft³ >25,000 yd³	ft³ ÷ 67.5 yd³ ÷ 2.5
	Other	≤6,750 ft³ ≤250 yd³	>6,750 to 675,000 ft³ >250 to 25,000 yd³	>675,000 ft³ >25,000 yd³	ft³ ÷ 67.5 yd³ ÷ 2.5
AREA	Landfill	≤340,000 ft² ≤7.8 acres	>340,000 to 34 million ft² >7.8 to 780 acres	>34 million ft² >780 acres	ft² ÷ 3,400 acres ÷ 0.078
	Surface impoundment	≤1,300 ft² ≤0.029 acres	>1,300 to 130,000 ft² >0.029 to 2.9 acres	>130,000 ft² >2.9 acres	ft² ÷ 13 acres ÷ 0.00029
	Contaminated soil	≤3.4 million ft² ≤78 acres	>3.4 million to 340 million ft² >78 to 7,800 acres	>340 million ft² >7,800 acres	ft² ÷ 34,000 acres ÷ 0.78
	Pile*	≤1,300 ft² ≤0.029 acres	>1,300 to 130,000 ft² >0.029 to 2.9 acres	>130,000 ft² >2.9 acres	ft² ÷ 13 acres ÷ 0.00029
	Land treatment	≤27,000 ft² ≤0.62 acres	>27,000 to 2.7 million ft² >0.62 to 62 acres	>2.7 million ft² >62 acres	ft² ÷ 270 acres ÷ 0.0062

1 ton = 2,000 lb = 1 yd³ = 4 drums = 200 gallons

* Use area of land surface under pile, not surface area of pile.

PA Table 1b: WC Scores for Multiple Source Sites

WC Total	WC Score
>0 to 100	18
>100 to 10,000	32
>10,000	100

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SOURCE EVALUATION

Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations:
1	Drums	10 drums (55-gallon) X 12 months X 16 years (1976 to 1992) = 1,920 drums

Source Description:

Wastes are stored in drums on the Northeastern portion of the site. In the past drums were stored directly on the ground surface and have been noted to be leaking. Currently drums are stored in the storage area on asphalt. 8 drums were recently observed on site and the highest quantity reported to be in the container drum storage area was 10 (55-gallon) drums per year. The Company reported that the average 10 (55-gallon) drums per year. Therefore it has been estimated that 1,920 drums of waste have been generated from the start of plant operations in 1992 when waste storage was reported to be in good condition with no leaking drums.

Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations:

Source Description:

Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations:

Source Description:

Site WC: 32

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GROUND WATER PATHWAY SCORESHEET

Pathway Characteristics		
Do you suspect a release (see Ground Water Pathway Criteria List, page 7)?	Yes ✓	No ___
Is the site located in karst terrain?	Yes ___	No ✓
Depth to aquifer:	0 to 21 m	
Distance to the nearest drinking water well:	700 m	

LIKELIHOOD OF RELEASE	A Suspected Release	B No Suspected Release	References
1. SUSPECTED RELEASE: If you suspect a release to ground water (see page 7), assign a score of 550. Use only column A for this pathway.	550		
2. NO SUSPECTED RELEASE: If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.			
LR =	550		

TARGETS			
3. PRIMARY TARGET POPULATION: Determine the number of people served by drinking water wells that you suspect have been exposed to a hazardous substance from the site (see Ground Water Pathway Criteria List, page 7). ___ people x 10 =			
4. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water wells that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 2. Are any wells part of a blended system? Yes ✓ No ___ If yes, attach a page to show apportionment calculations.	182		
5. NEAREST WELL: If you have identified a primary target population for ground water, assign a score of 50; otherwise, assign the Nearest Well score from PA Table 2. If no drinking water wells exist within 4 miles, assign a score of zero.	18		
6. WELLHEAD PROTECTION AREA (WHPA): If any source lies within or above a WHPA, or if you have identified any primary target well within a WHPA, assign a score of 20; assign 5 if neither condition holds but a WHPA is present within 4 miles; otherwise assign zero.	0		
7. RESOURCES	0		
T =	200		

WASTE CHARACTERISTICS		
8. A. If you have identified any primary target for ground water, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.		
B. If you have NOT identified any primary target for ground water, assign the waste characteristics score calculated on page 4.	32	
WC =	32	

GROUND WATER PATHWAY SCORE: $\frac{LR \times T \times WC}{82,500}$ (subject to a maximum of 100) **42.67**

NUS CORPORATION
SUPERFUND DIVISION

PROJECT NOTES

TO: The Bates Manufacturing File DATE: June 23, 1992

FROM: Susan Hodgkiss COPIES:

SUBJECT: GW population

REFERENCE: Telecon Notes

There are 4 potable public supply wells located within 4 miles of the site. These wells and 2 surface water intakes outside a 4-mile radius of the site service 16,000 people within 4 miles of the site.

No. of wells + intakes % population served = Number people per well location

well location (mile)	No. of wells	Number of people
0 - 1/4	0	0
1/4 - 1/2	1	2,286
1/2 - 1	0	0
1 - 2	0	0
2 - 3	2	4,572
3 - 4	1	2,286
		9,144

The remainder of the population (difference between 9,144 and 16,000) have been calculated out due to the dilution of the surface water intakes

Susan Hodgkiss

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PA TABLE 2: VALUES FOR SECONDARY GROUND WATER TARGET POPULATIONS

PA Table 2a: Non-Karst Aquifers

Distance from Site	Population	Nearest Well (choose highest)	Population Served by Wells Within Distance Category: 1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	Population Value
0 to ¼ mile	0	20	1	2	5	16	52	163	521	1,633	5,214	16,325	—
> ¼ to ½ mile	2290	18	1	1	3	10	32	101	323	1,012	3,233	10,121	101
> ½ to 1 mile	0	9	1	1	2	5	17	52	167	522	1,668	5,224	—
> 1 to 2 miles	0	5	1	1	1	3	9	29	94	294	939	2,938	—
> 2 to 3 miles	4570	3	1	1	1	2	7	21	68	212	676	2,122	68
> 3 to 4 miles	2290	2	1	1	1	1	4	13	42	131	417	1,308	13

Nearest Well = 18 Score = 182

PA Table 2b: Karst Aquifers

Distance from Site	Population	Nearest Well (use 20 for karst)	Population Served by Wells Within Distance Category: 1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	Population Value
0 to ¼ mile		20	1	2	5	16	52	163	521	1,633	5,214	16,325	
> ¼ to ½ mile		20	1	1	3	10	32	101	323	1,012	3,233	10,121	
> ½ to 1 mile		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 1 to 2 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 2 to 3 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 3 to 4 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	

Nearest Well = Score =

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SURFACE WATER PATHWAY
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT SCORESHEET

Pathway Characteristics

Do you suspect a release (see Surface Water Pathway Criteria List, page 11)? Yes ___ No ✓
Distance to surface water: 0.2 miles
Flood frequency: Over 500 yrs
What is the downstream distance to the nearest drinking water intake? N/A miles
Nearest fishery? N/A miles Nearest sensitive environment? N/A miles

	A Suspected Release	B No Suspected Release	References
LIKELIHOOD OF RELEASE			
1. SUSPECTED RELEASE: If you suspect a release to surface water (see page 11), assign a score of 550. Use only column A for this pathway.			
2. NO SUSPECTED RELEASE: If you do not suspect a release to surface water, use the table below to assign a score based on distance to surface water and flood frequency. Use only column B for this pathway.		500	
LR =		500	

Distance to surface water ≤ 2,500 feet	500
Distance to surface water > 2,500 feet, and	
Site in annual or 10-year floodplain	500
Site in 100-year floodplain	400
Site in 500-year floodplain	300
Site outside 500-year floodplain	100

DRINKING WATER THREAT TARGETS			
3. Record the water body type, flow (if applicable), and number of people served by each drinking water intake within the target distance limit. If there is no drinking water intake within the target distance limit, factors 4, 5, and 6 each receive zero scores.			
4. PRIMARY TARGET POPULATION: If you suspect any drinking water intake listed above has been exposed to a hazardous substance from the site (see Surface Water Pathway Criteria List, page 11), list the intake name(s) and calculate the factor score based on the total population served. ___ people x 10 =			
5. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water intakes that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 3. Are any intakes part of a blended system? Yes ___ No ___ If yes, attach a page to show apportionment calculations.		0	
6. NEAREST INTAKE: If you have identified a primary target population for the drinking water threat (factor 4), assign a score of 50; otherwise, assign the Nearest Intake score from PA Table 3. If no drinking water intake exists within the target distance limit, assign a score of zero.		0	
7. RESOURCES		5	
T =		5	

Intake Name	Water Body Type	Flow	People Served
		cfs	
		cfs	
		cfs	

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PA TABLE 3: VALUES FOR SECONDARY SURFACE WATER TARGET POPULATIONS

Surface Water Body Flow (see PA Table 4)	Population	Nearest Intake (choose highest)	Population Served by Intakes Within Flow Category											Population Value
			1 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	Greater than 1,000,000	
<10 cfs	____	20	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,246	____
10 to 100 cfs	____	2	1	1	2	5	16	52	163	521	1,633	5,214	16,325	____
>100 to 1,000 cfs	____	1	0	0	1	1	2	5	16	52	163	521	1,633	____
>1,000 to 10,000 cfs	____	0	0	0	0	0	1	1	2	5	16	52	163	____
>10,000 cfs or Great Lakes	____	0	0	0	0	0	0	0	1	1	2	5	16	____
3-mile Mixing Zone	____	10	1	3	8	26	82	261	816	2,607	8,162	26,068	81,663	____

Nearest Intake = N/A

Score = N/A

PA TABLE 4: SURFACE WATER TYPE / FLOW CHARACTERISTICS WITH DILUTION WEIGHTS FOR SECONDARY SURFACE WATER SENSITIVE ENVIRONMENTS

Type of Surface Water Body			Dilution Weight
Water Body Type	OR	Flow	
minimal stream		< 10 cfs	1
small to moderate stream		10 to 100 cfs	0.1
moderate to large stream		> 100 to 1,000 cfs	N/A
large stream to river		> 1,000 to 10,000 cfs	N/A
large river		> 10,000 cfs	N/A
3-mile mixing zone of quiet flowing streams or rivers		10 cfs or greater	N/A
coastal tidal water (harbors, sounds, bays, etc.), ocean, or Great Lakes		N/A	N/A

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SURFACE WATER PATHWAY (continued)
HUMAN FOOD CHAIN THREAT SCORESHEET

	A Suspected Release	B No Suspected Release	References
LIKELIHOOD OF RELEASE			
Enter Surface Water Likelihood of Release score from page 12. LR =		500	
HUMAN FOOD CHAIN THREAT TARGETS			
8. Record the water body type and flow (if applicable) for each fishery within the target distance limit. If there is no fishery within the target distance limit, assign a Targets score of 0 at the bottom of the page.			
9. PRIMARY FISHERIES: If you suspect any fishery listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 10. List the primary fisheries:			
10. SECONDARY FISHERIES			
A. If you suspect a release to surface water and have identified a secondary fishery but no primary fishery, assign a score of 210.			
B. If you do not suspect a release, assign a Secondary Fisheries score from the table below using the lowest flow at any fishery within the target distance limit.		12	
T =		12	

Fishery Name	Water Body Type	Flow
Musselshell River	River	309 cfs
		cfs
		cfs
		cfs
		cfs

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
> 100 cfs, coastal tidal waters, oceans, or Great Lakes	12

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SURFACE WATER PATHWAY (continued)
ENVIRONMENTAL THREAT SCORESHEET

	A Suspected Release	B No Suspected Release	References
LIKELIHOOD OF RELEASE			
Enter Surface Water Likelihood of Release score from page 12. LR =		500	
ENVIRONMENTAL THREAT TARGETS			
11. Record the water body type and flow (if applicable) for each surface water sensitive environment within the target distance limit (see PA Tables 4 and 5). If there is no sensitive environment within the target distance limit, assign a Targets score of 0 at the bottom of the page.			

Environment Name	Water Body Type	Flow
Wetlands	River	309 cfs
		cfs
		cfs
		cfs
		cfs

12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 111), assign a score of 300 and do not evaluate factor 13. List the primary sensitive environments:			
13. SECONDARY SENSITIVE ENVIRONMENTS: If sensitive environments are present, but none is a primary sensitive environment, evaluate Secondary Sensitive Environments based on flow.			

A. For secondary sensitive environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Flow	Dilution Weight (PA Table 4)	Environment Type and Value (PA Tables 5 and 6)	Total
cfs	x	=	
cfs	x	=	
cfs	x	=	
cfs	x	=	
cfs	x	=	
		Sum =	

B. If all secondary sensitive environments are located on surface water bodies with flows > 100 cfs, assign a score of 10.		10	
T =		10	

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PA TABLE 5: SURFACE WATER AND AIR PATHWAY SENSITIVE ENVIRONMENTS VALUES

Sensitive Environment	*Assigned Value*
Crucial habitat for Federally designated endangered or threatened species	100
Marine Sanctuary	
National Park	
Designated Federal Wilderness Area	
Ecologically important areas identified under the Coastal Zone Wilderness Act	
Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act	
Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes)	
National Monument (air pathway only)	
National Seashore Recreation Area	
National Lakeshore Recreation Area	
Habitat known to be used by Federally designated or proposed endangered or threatened species	75
National Preserve	
National or State Wildlife Refuge	
Unit of Coastal Barrier Resources System	
Federal land designated for the protection of natural ecosystems	
Administratively Proposed Federal Wilderness Area	
Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay, or estuary	
Migratory pathways and feeding areas critical for the maintenance of anadromous fish species in a river system	
Terrestrial areas utilized for breeding by large or dense aggregations of vertebrate animals (air pathway) or semi-aquatic foragers (surface water pathway)	
National river reach designated as Recreational	
Habitat known to be used by State designated endangered or threatened species	50
Habitat known to be used by a species under review as to its Federal endangered or threatened status	
Coastal Barrier (partially developed)	
Federally designated Scenic or Wild River	
State land designated for wildlife or game management	25
State designated Scenic or Wild River	
State designated Natural Area	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	
State designated areas for protection/maintenance of aquatic life under the Clean Water Act	5
Wetlands	See PA Table 6 (Surface Water Pathway) or PA Table 9 (Air Pathway)

PA TABLE 6: SURFACE WATER PATHWAY WETLANDS FRONTAGE VALUES

Total Length of Wetlands	*Assigned Value*
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	450
Greater than 20 miles	500

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SURFACE WATER PATHWAY (concluded)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY

WASTE CHARACTERISTICS	A Suspected Release	B No Suspected Release
14. A. If you have identified any primary target for surface water (pages 12, 14, or 15), assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	[illegible]	
B. If you have NOT identified any primary target for surface water, assign the waste characteristics score calculated on page 4.	[illegible]	[illegible] 32
WC =		32

SURFACE WATER PATHWAY THREAT SCORES

Threat	Likelihood of Release (LR) Score (from page 12)	Targets (T) Score (pages 12, 14, 15)	Pathway Waste Characteristics (WC) Score (determined above)	Threat Score LR x T x WC / 82,500
Drinking Water	500	5	32	0.97
Human Food Chain	500	12	32	2.33
Environmental	500	10	32	1.92

SURFACE WATER PATHWAY SCORE
(Drinking Water Threat + Human Food Chain Threat + Environmental Threat) 5.22

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SOIL EXPOSURE PATHWAY SCORESHEET

Pathway Characteristics		
Do any people live on or within 200 ft of areas of suspected contamination?	Yes ___	No ✓
Do any people attend school or daycare on or within 200 ft of areas of suspected contamination?	Yes ___	No ✓
Is the facility active? Yes ✓ No ___ If yes, estimate the number of workers: 130		

LIKELIHOOD OF EXPOSURE	Suspected Contamination	References
1. SUSPECTED CONTAMINATION: Surficial contamination can generally be assumed, and a score of 550 assigned. Assign zero only if the absence of surficial contamination can be confidently demonstrated. LE =	550	
RESIDENT POPULATION THREAT TARGETS		
2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or daycare on or within 200 feet of areas of suspected contamination (see Soil Exposure Pathway Criteria List, page 18). ___ people x 10 =	0	
3. RESIDENT INDIVIDUAL: If you have identified a resident population (factor 2), assign a score of 50; otherwise, assign a score of 0.	0	
4. WORKERS: Use the following table to assign a score based on the total number of workers at the facility and nearby facilities with suspected contamination:	10	
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Use PA Table 7 to assign a value for each terrestrial sensitive environment on an area of suspected contamination: Sum =	0	
6. RESOURCES	0	
T =	10	
WASTE CHARACTERISTICS		
7. Assign the waste characteristics score calculated on page 4. WC =	32	

Number of Workers	Score
0	0
1 to 100	5
101 to 1,000	10
>1,000	15

Terrestrial Sensitive Environment Type	Value

RESIDENT POPULATION THREAT SCORE: $\frac{LE \times T \times WC}{82,500.}$ = 2.13

NEARBY POPULATION THREAT SCORE: 0

SOIL EXPOSURE PATHWAY SCORE:
Resident Population Threat + Nearby Population Threat = 2.13

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PA TABLE 7: SOIL EXPOSURE PATHWAY TERRESTRIAL SENSITIVE ENVIRONMENT VALUES

Terrestrial Sensitive Environment	*Assigned Value*
Terrestrial critical habitat for Federally designated endangered or threatened species National Park Designated Federal Wilderness Area National Monument	100
Terrestrial habitat known to be used by Federally designated or proposed threatened or endangered species National Preserve (terrestrial) National or State terrestrial Wildlife Refuge Federal land designated for protection of natural ecosystems Administratively proposed Federal Wilderness Area Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	75
Terrestrial habitat used by State designated endangered or threatened species Terrestrial habitat used by species under review for Federal designated endangered or threatened status	50
State lands designated for wildlife or game management State designated Natural Areas Particular areas, relatively small in size, important to maintenance of unique biotic communities	25

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AIR PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Air Pathway Criteria List, page 21)?	Yes ___ No ✓
Distance to the nearest individual:	on-site

	A Suspected Release	B No Suspected Release	References
LIKELIHOOD OF RELEASE			
1. SUSPECTED RELEASE: If you suspect a release to air (see page 21), assign a score of 550. Use only column A for this pathway.			
2. NO SUSPECTED RELEASE: If you do not suspect a release to air, assign a score of 500. Use only column B for this pathway.		500	
LR =		500	
TARGETS			
3. PRIMARY TARGET POPULATION: Determine the number of people subject to exposure from a suspected release of hazardous substances to the air. ____ people x 10 =			
4. SECONDARY TARGET POPULATION: Determine the number of people not suspected to be exposed to a release to air, and assign the total population score using PA Table 8.		31	
5. NEAREST INDIVIDUAL: If you have identified any Primary Target Population for the air pathway, assign a score of 50; otherwise, assign the Nearest Individual score from PA Table 8.		20	
6. PRIMARY SENSITIVE ENVIRONMENTS: Sum the sensitive environment values (PA Table 5) and wetland acreage values (PA Table 9) for environments subject to exposure from a suspected release to the air. Sum =			
7. SECONDARY SENSITIVE ENVIRONMENTS: Use PA Table 10 to determine the score for secondary sensitive environments.		0	
8. RESOURCES		0	
T =		51	
WASTE CHARACTERISTICS			
9. A. If you have identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.			
B. If you have NOT identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4.		32	
WC =		32	

AIR PATHWAY SCORE: $\frac{LR \times T \times WC}{82{,}500}$ = 9.89

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PA TABLE 8: VALUES FOR SECONDARY AIR TARGET POPULATIONS

Distance from Site	Population	Nearest Individual (choose highest)	Population Within Distance Category: 1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	Greater than 1,000,000	Population Value
Onsite	130	20	1	2	5	16	52	163	521	1,633	5,214	16,326	52,136	163,246	16
>0 to ¼ mile	40	20	1	1	1	4	13	41	130	408	1,303	4,081	13,034	40,811	1
>¼ to ½ mile	110	2	0	0	1	1	3	9	28	88	282	882	2,815	8,815	1
>½ to 1 mile	300	1	0	0	0	1	1	3	8	26	83	261	834	2,612	8
>1 to 2 miles	690	0	0	0	0	0	1	1	3	8	27	83	266	833	3
>2 to 3 miles	230	0	0	0	0	0	1	1	1	4	12	38	120	376	1
>3 to 4 miles	380	0	0	0	0	0	0	1	1	2	7	23	73	229	1

Nearest Individual = 20

Score = 31

PA TABLE 9: AIR PATHWAY VALUES FOR WETLAND AREA

Wetland Area	Assigned Value
Less than 1 acre	0
1 to 50 acres	25
Greater than 50 to 100 acres	75
Greater than 100 to 150 acres	125
Greater than 150 to 200 acres	175
Greater than 200 to 300 acres	250
Greater than 300 to 400 acres	350
Greater than 400 to 500 acres	450
Greater than 500 acres	500

PA TABLE 10: DISTANCE WEIGHTS AND CALCULATIONS FOR AIR PATHWAY SECONDARY SENSITIVE ENVIRONMENTS

Distance	Distance Weight	Sensitive Environment Type and Value (from PA Table 5 or 9)	Product
Onsite	0.10	x	
		x	
0-1/4 mi	0.025	x	
		x	
		x	
1/4-1/2mi	0.0064	x	
		x	
		x	
		x	

Total Environments Score = 0

Excess — 5022-RIP

Bates
J042-R1

SITE SCORE CALCULATION

	S	S^2
GROUND WATER PATHWAY SCORE (S_{gw}):	42.67	1820.73
SURFACE WATER PATHWAY SCORE (S_{sw}):	5.22	27.25
SOIL EXPOSURE PATHWAY SCORE (S_s):	2.13	4.54
AIR PATHWAY SCORE (S_a):	9.89	97.81
SITE SCORE: $\sqrt{\frac{S_{gw}^2+S_{sw}^2+S_s^2+S_a^2}{4}}$		22.08