

Incident Name: Christina River Waste Oil Spill

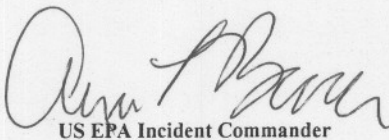
Location: Wilmington, Del

Monitoring Plan
July 25, 2006

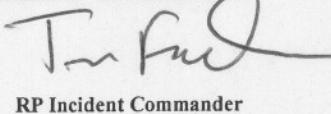
Purpose: the monitoring plan is intended to provide a frame work for responding to citizen and agency reports of oil on the Christina River and shoreline that may be from the Christian River Waste Oil Spill (CRWOS)

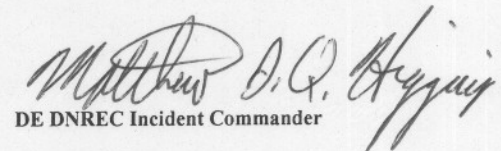
Procedure

1. Receiving reports of Black Oil.
 - a. The US EPA and DNREC will be the receiving agencies for reports of oil that might be associated with CRWOS.
 - b. Reports will be received through these agencies in their pre-incident reporting systems. No special reporting telephone number will be established.
2. Verification and Evaluation
 - a. DNREC will be responsible for verifying and evaluating each report received.
 - i. Agencies will continue to respond to complaints of black oil as in their normal practice.
 - ii. Agencies will be reimbursed for their verification and evaluation costs in those situations where it is believed that the black oil is from CRWOS.
 - b. If DNREC verifies that the reported occurrence is from CRWOS, the agency will contact the Responsible Party (RP)
3. Response
 - a. Upon notification of the verified report, the RP will initiate appropriate response resources as agreed upon with the agency representative.
 - b. Cleanup will continue until the RP and agency representatives agree that cleanup is complete.
 - i. The guidelines previously approved by the Unified Command during the active cleanup will be utilized. (Cleanup Endpoints July 24th 2006)
4. Termination of the Monitoring Plan
 - a. The Monitoring Plan will be terminated when no verified reports of black oil from CRWOS have been received for 30 calendar days
 - b. The Monitoring Plan May be terminated sooner upon agreement of the Unified Command


US EPA Incident Commander

Unified Command


RP Incident Commander


DE DNREC Incident Commander

* - This plan is effective From 7/25/06 through 8/24/06

7/25/2006

CLEANUP APPROVAL – CHRISTINA RIVER WASTE OIL SPILL

Date: 7/26/06

Shoreline Segment: A

The Unified Command and the Delaware Natural Resource Trustees determine removal completeness and authorize termination of cleanup operations. The guidelines for approval are found in the following table and removal is considered complete when the end points are achieved:

Shoreline Type	Cleanup Endpoint
Marshes	No recoverable or potentially mobile black oil in marsh areas where clean up can be performed from boats. Oil on vegetation does not rub off on contact.
Gravel, Cobble, Mixed Sand and Gravel	No recoverable or potentially mobile black oil.
Mud Flats	No recoverable or potentially mobile black oil.
Riprap	No recoverable or potentially mobile black oil. Oil on exposed surfaces (top and sides) does not rub off on contact; no greater than stain.
Solid Seawalls, Bulkheads, and Docks	No recoverable or potentially mobile black oil. Oil on exposed surfaces does not rub off on contact; no greater than stain.
Historic sites and High Use Public Access Areas <ul style="list-style-type: none"> • Three Boat Ramps (including "up the creek" • Christina Park • Fort Christina Park • Wilmington Rowing Club • Kalmar Nyckel Berth • 7th Street Marina near Fort Christina 	No recoverable or potentially mobile black oil. Oil on exposed surfaces does not rub off on contact; no greater than stain.

Ann L. Breslin

FOSC

Matthew D. Higgins

SOSC

Timothy Ford

RP

Robert Hessler - DNREC

TRUSTEE

[Signature]

US EPA

Matthew D. Higgins

DNREC

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US FILTER

Robert Hessler

AFFILIATION

7/26/2006

CLEANUP APPROVAL – CHRISTINA RIVER WASTE OIL SPILL

Date: 7/26/06

Shoreline Segment: B - * - Does not include section B7

The Unified Command and the Delaware Natural Resource Trustees determine removal completeness and authorize termination of cleanup operations. The guidelines for approval are found in the following table and removal is considered complete when the end points are achieved:

Shoreline Type	Cleanup Endpoint
Marshes	No recoverable or potentially mobile black oil in marsh areas where clean up can be performed from boats. Oil on vegetation does not rub off on contact.
Gravel, Cobble, Mixed Sand and Gravel	No recoverable or potentially mobile black oil.
Mud Flats	No recoverable or potentially mobile black oil.
Riprap	No recoverable or potentially mobile black oil. Oil on exposed surfaces (top and sides) does not rub off on contact; no greater than stain.
Solid Seawalls, Bulkheads, and Docks	No recoverable or potentially mobile black oil. Oil on exposed surfaces does not rub off on contact; no greater than stain.
Historic sites and High Use Public Access Areas <ul style="list-style-type: none"> • Three Boat Ramps (including "up the creek" • Christina Park • Fort Christina Park • Wilmington Rowing Club • Kalmar Nyckel Berth • 7th Street Marina near Fort Christina 	No recoverable or potentially mobile black oil. Oil on exposed surfaces does not rub off on contact; no greater than stain.

Ann L Breslin

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Ann T Bush

US EPA

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Timothy Ford

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TRUSTEE

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* - Note - Section B7 is not covered by this Sign-Off Document, and will be addressed under the DNREC UCP Program.
7/26/2006

CLEANUP APPROVAL – CHRISTINA RIVER WASTE OIL SPILL

Date: 7/26/06

Shoreline Segment: C

The Unified Command and the Delaware Natural Resource Trustees determine removal completeness and authorize termination of cleanup operations. The guidelines for approval are found in the following table and removal is considered complete when the end points are achieved:

Shoreline Type	Cleanup Endpoint
Marshes	No recoverable or potentially mobile black oil in marsh areas where clean up can be performed from boats. Oil on vegetation does not rub off on contact.
Gravel, Cobble, Mixed Sand and Gravel	No recoverable or potentially mobile black oil.
Mud Flats	No recoverable or potentially mobile black oil.
Riprap	No recoverable or potentially mobile black oil. Oil on exposed surfaces (top and sides) does not rub off on contact; no greater than stain.
Solid Seawalls, Bulkheads, and Docks	No recoverable or potentially mobile black oil. Oil on exposed surfaces does not rub off on contact; no greater than stain.
Historic sites and High Use Public Access Areas <ul style="list-style-type: none"> • Three Boat Ramps (including "up the creek" • Christina Park • Fort Christina Park • Wilmington Rowing Club • Kalmar Nyckel Berth • 7th Street Marina near Fort Christina 	No recoverable or potentially mobile black oil. Oil on exposed surfaces does not rub off on contact; no greater than stain.

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7/26/2006

CLEANUP APPROVAL – CHRISTINA RIVER WASTE OIL SPILL

Date: 7/26/06

Shoreline Segment: D

The Unified Command and the Delaware Natural Resource Trustees determine removal completeness and authorize termination of cleanup operations. The guidelines for approval are found in the following table and removal is considered complete when the end points are achieved:

Shoreline Type	Cleanup Endpoint
Marshes	No recoverable or potentially mobile black oil in marsh areas where clean up can be performed from boats. Oil on vegetation does not rub off on contact.
Gravel, Cobble, Mixed Sand and Gravel	No recoverable or potentially mobile black oil.
Mud Flats	No recoverable or potentially mobile black oil.
Riprap	No recoverable or potentially mobile black oil. Oil on exposed surfaces (top and sides) does not rub off on contact; no greater than stain.
Solid Seawalls, Bulkheads, and Docks	No recoverable or potentially mobile black oil. Oil on exposed surfaces does not rub off on contact; no greater than stain.
Historic sites and High Use Public Access Areas <ul style="list-style-type: none"> • Three Boat Ramps (including "up the creek" • Christina Park • Fort Christina Park • Wilmington Rowing Club • Kalmar Nyckel Berth • 7th Street Marina near Fort Christina 	No recoverable or potentially mobile black oil. Oil on exposed surfaces does not rub off on contact; no greater than stain.

Ann L Beslin

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Matthew D.Q. Higgins

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Timothy Ford

RP

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7/26/2006

CLEANUP APPROVAL – CHRISTINA RIVER WASTE OIL SPILL

Date: 7/26/06

Shoreline Segment: E

The Unified Command and the Delaware Natural Resource Trustees determine removal completeness and authorize termination of cleanup operations. The guidelines for approval are found in the following table and removal is considered complete when the end points are achieved:

Shoreline Type	Cleanup Endpoint
Marshes	No recoverable or potentially mobile black oil in marsh areas where clean up can be performed from boats. Oil on vegetation does not rub off on contact.
Gravel, Cobble, Mixed Sand and Gravel	No recoverable or potentially mobile black oil.
Mud Flats	No recoverable or potentially mobile black oil.
Riprap	No recoverable or potentially mobile black oil. Oil on exposed surfaces (top and sides) does not rub off on contact; no greater than stain.
Solid Seawalls, Bulkheads, and Docks	No recoverable or potentially mobile black oil. Oil on exposed surfaces does not rub off on contact; no greater than stain.
Historic sites and High Use Public Access Areas <ul style="list-style-type: none"> • Three Boat Ramps (including "up the creek" • Christina Park • Fort Christina Park • Wilmington Rowing Club • Kalmar Nyckel Berth • 7th Street Marina near Fort Christina 	No recoverable or potentially mobile black oil. Oil on exposed surfaces does not rub off on contact; no greater than stain.

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AFFILIATION

7/26/2006

Christina River Oil Spill
SHORELINE SEGMENTS

Operational Divisions				
Division	Geographic Extent			
A	Mouth of Christina R. to Penn Central RR Bridge			
B	Penn Central RR Bridge to US Filter			
C	US Filter to S. James St. Bridge			
D (new)	S. James St. Bridge to Churchman's Road Bridge (DE-58)			
E (new)	Christina River Confluence (South Bank) to Old New Castle			
SCAT Segments				
Division	Segment ID	Waterbody	Segment Name	Geographic Extent
A	A1	Christina River	Port of Wilmington	Del. R. confluence (south bank) to Lobdell Canal
A	A2	Christina River	Cherry Island	Del. R. confluence (north bank) to Penn Central RR Bridge
A	A3	Christina River	Christina Ave. Waterfront	Lobdell Canal to Penn Central RR Bridge
B	B1	Christina River	South Wilmington Waterfront	Penn Central RR Bridge to Heald St. Bridge (South Bank)
B	B2	Christina River	Powerline Crossing	Penn Central RR Bridge to Brandywine Creek Confluence (East Bank)
B	B3	Christina River	A Street Waterfront	Heald St. Bridge to Market St. Bridge (South Bank)
B	B4	Christina River	7th Street Waterfront	Brandywine Creek Confluence (West Bank) to Heald St. Bridge
B	B5	Christina River	S. Market St. Waterfront	Market Street Bridge (South Bank) to US Filter
B	B6	Christina River	Wilmington Waterfront East	Heald St. Bridge to Market St. Bridge (North Bank)
B	B7	Christina River	US Filter	US Filter Property
B	B8	Christina River	River Walk North	Market Street Bridge (North Bank) to Ship Yard Shops (Opposite US Filter)
B	B09	Brandywine Creek	Wilmington Industrial Park	Christina River Confluence to Amtrak RR Bridge (West Bank)
B	B10	Brandywine Creek	12th Street Waterfront	Christina River Confluence to Amtrak RR Bridge (East Bank)
B	B11	Brandywine Creek	Greater Kirkwood Park	Amtrak RR Bridge to Market St. Bridge (West Bank)
B	B12	Brandywine Creek	Greater Brandywine Mills Park	Amtrak RR Bridge to Market St. Bridge (East Bank)
B	B13	Brandywine Creek	South Park Dr. Waterfront	Market St. Bridge to Brandywine Creek I-95 Bridge (West Bank)
B	B14	Brandywine Creek	North Park Dr. Waterfront	Market St. Bridge to Brandywine Creek I-95 Bridge (East Bank)
C	C1	Christina River	James Court Industrial Park	US Filter to Railroad Bridge
C	C2	Christina River	River Walk South	Ship Yard Shops to Railroad Bridge (West Bank)
C	C3	Christina River	West Minquadale	Railroad Bridge to I-95 Bridge (South Bank)
C	C4	Christina River	Coopers Island	Railroad Bridge to I-95 Bridge (North Bank)
C	C4.1	Christina River	Peterson Refuge	Little Mill Creek
C	C5	Christina River	Newport Marsh East	I-95 Bridge to Nonesuch Creek (South Bank)
C	C6	Christina River	Newport Industrial Park East	I-95 Bridge to Newport Boat Ramp (North Bank)
C	C7	Christina River	Newport Marsh West	Nonesuch Creek to S. James St. Bridge (South Bank)
C	C8	Christina River	Newport Industrial Park West	Newport Boat Ramp to S. James St. Bridge (North Bank)
D	D1	Christina River	Old Airport Road Junkyard	S. James St. Bridge to I-95 Bridge (East Bank)
D	D2	Christina River	Ciba-Giegy	S. James St. Bridge to I-95 Bridge (West Bank)
D	D2.1	White Clay Creek	White Clay Creek	Christina River Confluence to Hershey Run
D	D2.2	Christina River	Churchman's Marsh North	Churchman's Marsh North of I-95
D	D3	Christina River	Christiana Acres	I-95 Bridge to Churchman's Road/Rt. 58 (East Bank)
D	D4	Christina River	Churchman's Marsh South	I-95 Bridge to Churchman's Road/Rt. 58 (West Bank)
E	E1	Delaware River	Pigeon Point	Christina River Confluence (South Bank) to Delaware Memorial Bridge
E	E2	Delaware River	New Castle Flats	Delaware Memorial Bridge to Battery Park

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7/26/06
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Christina River Oil Spill
SHORELINE CLEANUP PLAN

Based on the findings of SCAT surveys performed on 21-22 July 2006, the following shoreline cleanup actions are submitted to the Unified Command for consideration:

Division	Segment ID	Segment Name	Proposed Action
A	A1	Port of Wilmington	No shoreline cleanup proposed; recommend for sign-off.
A	A2	Cherry Island	No shoreline cleanup proposed; recommend for sign-off.
A	A3	Christina Ave. Waterfront	No shoreline cleanup proposed; recommend for sign-off.
B	B1	South Wilmington Waterfront	No shoreline cleanup proposed; recommend for sign-off.
B	B2	Powerline Crossing	No shoreline cleanup proposed; recommend for sign-off.
B	B3	A Street Waterfront	No shoreline cleanup proposed; recommend for sign-off.
B	B4	7th Street Waterfront	No shoreline cleanup proposed; recommend for sign-off.
B	B5	S. Market St. Waterfront	No shoreline cleanup proposed; recommend for sign-off.
B	B6	Wilmington Waterfront East	No shoreline cleanup proposed; recommend for sign-off.
B	B7	US Filter*	Refer to DNREC for followup action under Field Work Order & VCP
B	B8	River Walk North	No shoreline cleanup proposed; recommend for sign-off.
B	B09	Wilmington Industrial Park	No shoreline cleanup proposed; recommend for sign-off.
B	B10	12th Street Waterfront	No shoreline cleanup proposed; recommend for sign-off.
B	B11	Greater Kirkwood Park	Unoiiled
B	B12	Greater Brandywine Mills Park	Unoiiled
B	B13	South Park Dr. Waterfront	Unoiiled
B	B14	North Park Dr. Waterfront	Unoiiled
C	C1	James Court Industrial Park	No shoreline cleanup proposed; recommend for sign-off.
C	C2	River Walk South	No shoreline cleanup proposed; recommend for sign-off.
C	C3	West Minquadale	No shoreline cleanup proposed; recommend for sign-off.
C	C4	Coopers Island	No shoreline cleanup proposed; recommend for sign-off.
C	C4.1	Peterson Refuge	Unoiiled
C	C5	Newport Marsh East	No shoreline cleanup proposed; recommend for sign-off.
C	C6	Newport Industrial Park East	No shoreline cleanup proposed; recommend for sign-off.
C	C7	Newport Marsh West	No shoreline cleanup proposed; recommend for sign-off.
C	C8	Newport Industrial Park West	Unoiiled
D	D1	Old Airport Road Junkyard	No shoreline cleanup proposed; recommend for sign-off.
D	D2	Ciba-Giegy	Unoiiled
D	D2.1	White Clay Creek	Unoiiled
D	D2.2	Churchman's Marsh North	No shoreline cleanup proposed; recommend for sign-off.
D	D3	Christiana Acres	No shoreline cleanup proposed; recommend for sign-off.
D	D4	Churchman's Marsh South	No shoreline cleanup proposed; recommend for sign-off.
E	E1	Pigeon Point	Unoiiled
E	E2	New Castle Flats	Unoiiled

* Includes shoreline wetlands and impacted upland portions of US Filter property

Jim Brush USEPA 7/26/06 *Matthew D.Q. Higgins* 7/16/06 DE-DNREC-EPAB