



Fisheries
and Oceans

Pêches
et Océans

Southwest Nova Scotia

280 Logan Road
Bridgewater, Nova Scotia
B4V 3X1

Sud-Ouest De La Nouvelle
Ecosse

280, rue Logan
Bridgewater, Nouvelle-Ecosse
B4V 3X1

May 28, 2003

INSPECTOR'S

DIRECTION

Pursuant to Section 38(6) of the Fisheries Act

To: Nova Stone Exporters Inc.
Registry Number 3058438
10 Church Street
Truro, Nova Scotia
B2N 5B9
and

Corinna Kincaid, Director and
20 Scotia Street
Bridgewater, Nova Scotia
B4V 1E5
Telephone (902) 521-5583
and

Brian Lowe
R.R. #1
Deep Brook, Nova Scotia
B0J 1J0
Telephone (902) 245-8449

Paul Buxton, P.Eng.
P.O. Box 98
Annapolis Royal, Nova Scotia
B0S 1A0

This is the follow-up Inspectors Direction attached to the verbal directive given on-site to Mr. Brian Lowe and Mr. Paul Buxton by Thomas Wheaton prior to 1300 hours on May 27, 2003.

Description of Occurrence:

Fisheries and Oceans, Canada (DFO) personnel, Thomas Wheaton (Habitat Management Officer) and Lesley Coolen (Fisheries Officer) visited the site known as the "Whites Point Quarry" on May 27, 2003, in response to complaints from local residents about a sediment spill into the Bay of Fundy (BAY). The property is identified in the Provincial database as PID number 30161160 and is owned by Nova Stone Exporters Inc. (Registry Number 3058438).

After the site inspection, Mr. Wheaton and Ms. Coolen met on-site with Mr. Brian Lowe (Nova Stone Exporters Inc) site supervisor, Mr. Paul Buxton (engineering Consultant and contact person for Nova Stone Exporters Inc) and Mr. David Kearn (Environmental Consultant for Nova Stone Exporters Inc.).

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The site conditions were discussed, concerns voiced and a verbal Inspectors Direction to take remedial measures was given with notice that a written version would be provided.

The conditions on the property where active operations were occurring that resulted in the issuing of the Inspectors Direction included the following:

- ◆ A significant portion of area covering this local slope of the North Mountain was being cleared and grubbed resulting in a large area of exposed and unstable soil.
- ◆ A newly constructed trench was observed at the bottom of the slope of the cleared/grubbed area leading water flow into the small outlet trench from the on-site settling/impoundment pond (thus by-passing the pond completely). The trench sideslopes and bottom were not stabilized resulting in a higher sediment load in the effluent directed out to the BAY.
- ◆ The small outlet trench had one small older and deteriorated check dam (straw and filter fabric) near its outlet. This dam was ineffective and the water on both sides appeared to have the same sediment load. This then outletted into the BAY.
- ◆ The on-site settling/impoundment pond was receiving a steady flow of water from an area other than the disturbed site and did not appear to be of sufficient size to hold this constant input plus the precipitation from a major event long enough to allow proper settling.
- ◆ The southwest edge of the settling/impoundment pond was constructed (fairly recently) of unconsolidated fill. The rip-rapped outlet channel had filter fabric under the rip-rap, however the remainder of this berm did not appear to be stabilized. This resulted in erodible conditions and a further contribution to the sediment load.
- ◆ The settling/impoundment pond outlet appeared to be at a higher elevation than portions of the north and west berms. Consequently, sediment-laden water would overtop in these portions and spill into the Bay, rather than outletting through the directed outlet.
- ◆ Mounds of loose unconsolidated fill were noted within the settling/impoundment pond.
- ◆ A substantial raised and flattened area of topsoil was located immediately adjacent to the directed outlet trench. This, in fact, formed the south edge 'berm' of the outlet trench. None of this area appeared to be stabilized and there were no erosion control measures present to prevent sediment from this topsoil pile reaching the BAY.
- ◆ There were no silt fences or other erosion control measures present anywhere on-site.
- ◆ Evidence of sediment entering the BAY from the disturbed area, was found in two distinct areas along the shore and intertidal zone.

The BAY is known to support a diverse and productive fishery. In the application for this project, the project description (submitted for Global Quarry Products, the operating arm of Nova Stone Exporters Inc., by their Consultants) notes that "in Whites Cove, periwinkles, blue mussels, hermit crabs, dog welks and green crabs inhabit the areas of the intertidal zone. The bottom composition of the sub-tidal and nearshore waters is primarily bedrock and supports lobster, starfish, sea urchins, sea cucumbers and various fish including herring". This project description also acknowledges that the near-shore portion of the Bay of Fundy is used primarily by lobster, herring, and sea cucumber fishers.

Sediment is defined as a "deleterious substance" under the Fisheries Act. It is my opinion that sediment deposition into the BAY is currently occurring during precipitation events. Additionally, there is an imminent danger of the further deposit of a deleterious substance (sediment) into the BAY from this site due to:

- ◆ the amount of unstable erodible substrate;
- ◆ instability of the trench slopes and berms;
- ◆ stockpile of loose topsoil;
- ◆ insufficient storage capacity in the settling/impoundment pond;
- ◆ close proximity to the BAY;
- ◆ lack of appropriate sediment controls.

Excerpts from the Fisheries Act:

Section 35(1): No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.

Section 36(3): No person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water.

Fish Habitat: Spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.

It is my view that this area constitutes fish habitat as defined under the Fisheries Act and provides migratory, nursery, rearing and feeding habitat for one or more fish species important to the fisheries of Southwest Nova Scotia.

These species and their important habitat features may have already been impacted and are in danger of further impact from sediment deposition and any contained contaminants into the waterbody, as well as uncontrolled run-off from recently disturbed areas. It is for this reason that you are being ordered to take the following actions:

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Pursuant to Section 38(6) of the Fisheries Act you are directed to take the following reasonable measures consistent with safety, and conservation of fish and fish habitat to prevent the above mentioned occurrence or to counteract, mitigate, or remedy, any adverse effects that have resulted or may reasonably be expected to result from the above mentioned occurrence:

1. *Immediately (within 48 hours of having received the verbal Inspectors Direction) install a TYPE 2-silt fence along the entire perimeter (BAY-side) of the disturbed area ensuring that the sediment barrier fabric is well secured to the bottom. This is to be completed prior to carrying out any other measures.*
2. *Immediately (within 48 hours of having received the verbal Inspectors Direction) redirect the trench (that is present along the bottom of the cleared/grubbed area) into the settling/impoundment pond area.*
3. *Immediately (within 48 hours of having received the verbal Inspectors Direction) remove the deteriorated check dam from the outlet trench and install at least two new dams spaced appropriately to promote effective settling.*
4. *The integrity of these measures is to be monitored no less than once every three days and any deterioration is to be repaired as soon as possible. A record of this is to be kept and provided to DFO, C&P Detachment Office in Digby, at weekly intervals.*
5. *Within 7 days of receiving this Inspectors Direction, submit a detailed long-term erosion and sediment control plan, prepared by a qualified professional, to Mr. Thomas Wheaton, A/Area Habitat Coordinator, Fisheries and Oceans, Canada, Habitat Management Division, 280 Logan Road, Bridgewater, Nova Scotia, B4V 3X1, telephone: 902-527-5596. This plan shall be complete with calculations for flow volume and retention rates and provide both a monitoring plan and contingency measures.*

Please notify the undersigned at 902-527-5596 as soon as items #1 through #3 are completed so that an inspection can be carried out to ensure that these measures have been completed to the satisfaction of DFO.

Name of Inspector Designated under Department of Fisheries and
Canada

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Section 38 of the Fisheries Act:

Thomas J. Wheaton

Oceans – Habitat Management
Division (DFO-HMD).

Signature of Inspector _____

NOTES:

- 1) Compliance with this order does not preclude any legal action this department may take with respect to this matter.**
- 2) Failure to comply with the whole or part of the direction of an Inspector is a violation of Section 40(3)(f) of the Fisheries Act.**

Copy: DFO-Conservation and Protection, Digby
DFO-Regional Headquarters, Dartmouth
Nova Scotia Department of Environment and Labour, Yarmouth