

**Halifax Regional Council**  
**October 21, 2003**

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:**

*Man Scarfone For.*

Brad Anguish, P.Eng., Director Environmental Management Services

**DATE:** October 15, 2003

**SUBJECT:** Nova Scotia Power - Tufts Cove Emissions

### INFORMATION REPORT

#### ORIGIN

Regional Council meeting - August 19, 2003  
10.3.5 Councillor Smith - Nova Scotia Power Tufts Cove Emissions

#### BACKGROUND

At the August 19<sup>th</sup> Regional Council meeting Councillor Smith expressed concerns regarding the pollution problem in his district as a result of emissions from the Tufts Cove plant. The Councillor referenced newspaper articles dated July 1, 2003, and January 9, 2001, regarding this problem. Councillor Smith suggested that Nova Scotia Power could resolve the problem by using natural gas rather than crude oil as its primary fuel source. The Councillor stated more needs to be done to protect the residents of the area. Councillor Smith acknowledged that Nova Scotia Power does some good things for the community, but these efforts do not mitigate the problem of emission pollution.

It was moved by Councillor Smith, seconded by Councillor Cunningham, that Council request that the Mayor forward a letter to Nova Scotia Power Corporation outlining the residents' concerns. Also, that a letter be sent to the Provincial Department of Environment outlining the concerns and inquiring if they have received any complaints of environmental pollution around Tufts Cove, and, if so, what action have they taken. **Further, that Council ask HRM's Environmental Management Services to examine the situation and provide a report back to Council.**

## **DISCUSSION**

Environmental Management Services staff met recently with senior staff from Nova Scotia Power Inc. to discuss the concerns raised at Regional Council.

Jurisdictionally, the Nova Scotia Department of Environment and Labour (NSDEL) manages air quality in the province through the Environmental Act. The Air Quality Regulations are specified in the Operating Approvals. These requirements are consistent with national air quality objectives. Tufts Cove must meet these standards.

HRM staff also discussed with Nova Scotia Power officials the specific concerns as referenced recently at Regional Council and how they are being mitigated to reduce the probability of future incidents.

The attached letter from Nova Scotia Power Inc. dated September 15, 2003, outlines their obligations and conditions to be met under the Air Quality Regulations and gives a brief overview of the particulate emissions concern which was raised at Regional Council including their plans to reduce future incidents. The letter also addresses Nova Scotia Power's plans for future alternate fuel options.

Staff are cognizant that although air quality standards and regulations are not within municipal authority, this matter is important to HRM residents, especially those who have been directly impacted by the particulate fall-out from the Nova Scotia Power emission stacks at Tufts Cove. Staff are further cognizant that this report falls short of Councillor Smith's expectations for a detailed examination of the particulate fall-out situation at Tufts Cove.

HRM's Environmental Management Services (EMS) business unit is new and our mandates and business plans will evolve over time to meet appropriate municipal priorities and needs. The current EMS business plan and operating budget does not have any resources identified for investigating these air-related situations on behalf of Regional Council and/or HRM residents. This requirement will be considered when assembling the EMS business plan for next year.

## **BUDGET IMPLICATIONS**

N/A

**FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN**

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

**ALTERNATIVES**

N/A

**ATTACHMENTS**

Attachment "A" - Letter dated September 15, 2003, from Nova Scotia Power

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Stephen King, Manager-Senior Advisor, Strategic & Sustainable Resource Mgt., EMS, 490-6188

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September 15, 2003

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Dear Mr. King:

Thank you for taking the time to meet with us recently. I am writing some background information regarding our Tufts Cove Generating Station.

The Nova Scotia Department of Environment & Labour (NSDEL) manages air quality in the province through the Environment Act, its Air Quality Regulations and in terms & conditions specified in Operating Approvals. Specific limits for sulphur dioxide, nitrogen dioxide, and total suspended particulate are outlined in the regulation. These requirements are consistent with national air quality objectives and are similar to limits in other jurisdictions.

The Tufts Cove Generating Station is operated in accordance with these requirements and consistent with conditions outlined in its operating approval. The station has a comprehensive monitoring program and is in regular contact with the Nova Scotia Department of Environment & Labour staff to review performance and ensure that the ongoing operation meets the requirements of the department.

Like any large industrial operation, there are occasional upsets that can occur at the station. The overall approach is to immediately take steps to stop the upset condition, to address any resultant impacts and to identify and implement feasible measures to reduce the chance of future such incidents. This past summer the Tufts Cove station experienced a period of some atypical additional particulate emissions. The station immediately investigated the situation, taking several steps to abate the particulate fallout. NSDEL was notified of the problem and we have been in regular contact with them throughout the incident and recovery period. Tufts Cove G. S. also dispatched crews to wash cars and other property in the area near the plant.

Some of the specific actions taken to address the fallout during this period include:

- Unit #1 was shutdown for inspection and returned to service on gas
- Unit #3 was removed from service for a complete boiler clean and inspection
- Unit #2 was removed from service for a complete boiler clean and inspection
- Investigations were carried out re the additive system, some adjustments were made
- The fuel specification was reviewed. While that particular batch of oil was within specification, it was higher in ash than normal. More recent oil deliveries have returned to more traditional lower ash content.

We continue to do additional work to reduce the probability of future incidents. A number of equipment improvements were already planned for this fall including the installation of a Unit #3 air heater bypass and some new feedwater heaters. We continue to work with our suppliers in reviewing our oil purchase specification to avoid a future repeat of this situation. Efforts are also underway to review other technology to improve ongoing performance.

In the past few years NSPI has invested significantly in the Tufts Cove station. Units 1,2 and 3 were converted in 2000 to be able to burn natural gas and oil, providing flexibility for future operation. In 2003, NSPI has constructed a new 47 MW gas turbine station (Tufts Cove #4). This state of the art unit is an important addition to the NSPI fleet and represents another positive step toward improved environmental performance.

I trust this information will be of assistance as you prepare a report to Regional Council.

Yours truly



Terry Toner  
Sr. Manager – Environment  
Power Production

pc: Doug Campbell  
Peter Doig