

**Bennett Environmental Inc.**, a North American leader in the high temperature treatment of contaminated soils, proposes to construct and operate a High Temperature Thermal Oxidizer (HTTO) facility in Belledune, NB. The proposed facility would treat approximately 100,000 tonnes per year of hydrocarbon and creosote impacted soils and solid materials, mainly from “brownfield” site remediation projects within North America.

### Who is Bennett Environmental?

Bennett Environmental Inc. is a publicly-traded company which specializes in the high temperature treatment of contaminated soil from various remediation projects within North America. We have delivered solutions to satisfied customers in the environmental industry for over 30 years. Some of our prestigious clients have included the Government of Canada, the Department of National Defense, the United States Environmental Protection Agency, and the United States Army Corps of Engineers, to name a few. Bennett Environmental is listed on the Toronto Stock Exchange (trading symbol “BEV”) and on the American Stock Exchange (trading symbol “BEL”).

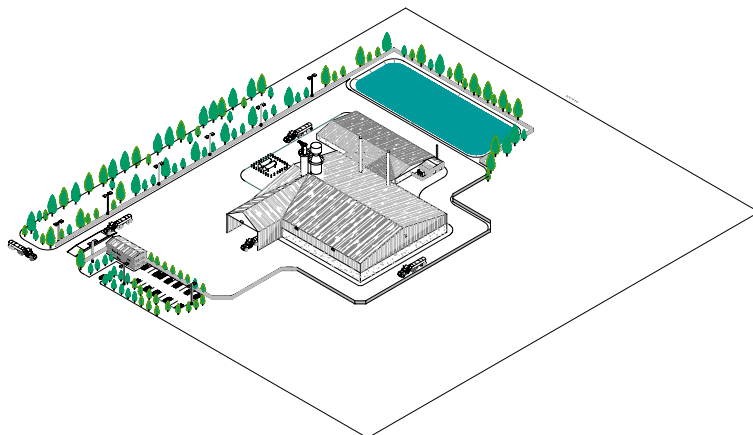
### Why Treat Contaminated Soils?

Contaminated sites throughout North America can cause significant concerns for the environment, including groundwater quality, air quality, and aquatic life. These sites can release pollutants into the environment and cause contamination of water supplies and damage sensitive ecosystems. The contaminated sites may also “off-gas” their volatile contaminants which can cause air pollution locally, or be transported to far away locations by winds and cause regional and global air pollution. It is therefore desirable to minimize the potential environmental damage by removing such contaminated materials and treating these soils in an environmentally-friendly manner to remove and destroy these contaminants, and enabling these soils to be reused.

### The Proposed Treatment Process at Belledune

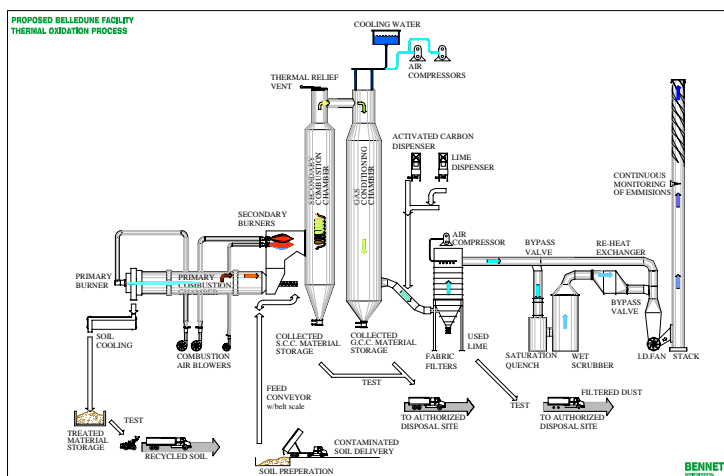
Bennett has developed a state-of-the-art thermal treatment system equipped with a sophisticated air pollution control system that reduces emissions of air pollutants in a manner that meets the most stringent emission limits in North America. The fully automated plant will have the ability to treat up to 100,000 tonnes per year of soils and solid materials contaminated with hydrocarbons and creosote. There will be no liquid wastes, radioactive wastes, or biohazardous wastes accepted at the facility for treatment.

The proposed facility will be located on approximately 20 acres of land within the Belledune industrial park. The active portion of the facility will constitute approximately 10 acres of land, with the remainder of the land being maintained as buffer zones. An artist’s concept of the facility is shown below.



The feed material will be brought to the proposed site by rail, ship or transport truck, depending on the original source location of the materials and economics. In all cases, the transportation will be strictly controlled to meet or exceed regulatory transportation standards. All incoming materials and treated soils will be stored indoors, thereby minimizing the potential for accidental release of contaminants to the environment. All water at the facility, including rain water, will be tested and reused in the process, thereby resulting in no liquid wastes being released from the facility.

A schematic of the process is shown below. The thermal oxidizer process will also occur indoors. The feed material will be introduced into the primary combustion chamber (PCC) where the contaminants will be volatilized at temperatures between 450-650°C, thereby enabling the treated soils to be virtually free of their original contaminants.



The volatilized pollutants from the high temperature treatment process will then be destroyed in the secondary combustion chamber (SCC) and removed in several sophisticated air pollution control units. The treated soil materials will be tested to ensure that the material is clean, and will then be reused in value added soil products such as compost or shipped outside New Brunswick for final disposal.

### Similar Facilities to the Proposed Belledune Project

The proposed facility design and operation will be similar to Bennett's existing treatment facility in St. Ambroise, Québec, which has operated successfully since 1995. Récupère Sol Inc. (RSI), a wholly-owned subsidiary of Bennett Environmental, currently operates this plant and is currently licensed to treat up to 100,000 tonnes/year of soil and solid materials contaminated with chlorinated and non-chlorinated organic compounds.

The RSI operation has an excellent track record in meeting the required destruction efficiencies (DREs), operating well below the regulatory emission limits and operating without causing adverse environmental effects, including cumulative effects, on air quality, surface water quality or groundwater.

The treatment operation proposed for Belledune would be of a similar size to the existing RSI facility, with the exception that only non-chlorinated hydrocarbon contaminated soils and creosote contaminated soils will be treated at Belledune.

### Superior Environmental Protection

The proposed project will be equipped with highly effective technology for the treatment of soils and solid materials contaminated with hydrocarbon and creosote compounds, as well as some of the most sophisticated air pollution control equipment for the treatment of air emissions resulting from the process.

The proposed facility will also provide New Brunswick and Canada with a world class facility for treating hydrocarbon impacted soil and solid materials.

### Benefits of the Project

The proposed facility is expected to result in positive economic impacts to the Belledune area in terms of direct and indirect employment, local equipment supplies during construction, and increases in the local tax base in Belledune. Some of these economic benefits include:

- Direct employment of 36 jobs with an estimated payroll of \$1.3 million per year;
- Indirect employment from trucking of inbound material of 35 jobs throughout North America, and 4 to 6 local jobs trucking outbound material;
- Spin off employment for laboratories, maintenance firms, suppliers, and consultants of 12 jobs; and
- Spin off jobs in the local economy of 10 jobs.

In addition, Bennett plans to establish a Community Development Fund in the amount of \$10 per tonne of treated material. Ten percent of this fund will be targeted for community enhancement spending such as scholarships, contribution to local festivals, schools, service clubs, and other local organizations. The other 90% of the fund will

target the incubation of other environmentally-related companies.

### Project Status

The project was granted approval to proceed on January 17, 2003 by the Minister of the Environment and Local Government, as per a Certificate of Determination issued under the *Environmental Impact Assessment Regulation* of New Brunswick. The approval was subject to 24 conditions which must be fulfilled prior to the construction and operation of the facility. Some of these conditions include:

- Complete a Human Health Risk Assessment including the modelling of dispersion and deposition of air contaminants;
- Hold a public information session, and establish a Community Environmental Liaison Committee;
- Conduct further environmental studies, such as rare plant surveys, wildlife habitat assessments, baseline environmental sampling, and others;
- Develop a comprehensive Environmental Protection Plan related to the construction and operation activities at the facility;
- Limits on the amount of treated soil at the facility;
- Establish a soil sampling and groundwater monitoring program;
- Installation of continuous monitoring equipment for a variety of chemicals;
- Obtain Approvals to Construct and Approvals to Operate under the *Clean Air Act*, and so on.

We are now in the process of working on these conditions, in order to fulfill our obligations to the Province of New Brunswick regarding this project and to communicate our plans to our neighbours. Many of these conditions have been fulfilled.

The proposed facility will be designed and operated to meet all applicable Federal and Provincial regulations, standards and guidelines. Bennett will also adhere to all applicable safety, building, and municipal regulations and codes.

### Communicating with our Neighbours

Bennett is keenly aware of the sensitivity of the proposed project, and is committed to communicating frequently and openly with our neighbours and interested stakeholders. We have formed a Community Environmental Liaison Committee (CELC) to act as the liaison with our neighbours and to represent the interests of the community. The CELC is intended to be our primary means of communicating with our neighbours, and we encourage members of the public to contact us with their questions or concerns, either directly or through the CELC.

## Frequently Asked Questions and Answers

*Q: Where will the contaminated material come from?*

A: The majority of the impacted soils would most likely come from Eastern Canada and the Northeastern United States.

*Q: Why build this facility in Belledune?*

A: The Village of Belledune is strategically located for our operations. It is within an acceptable distance from many potential clients in North America to maintain a reasonably economical operation, despite the transportation costs. Belledune has a well-established rail transportation system, the highway transportation system is adequate, and Belledune is also home to a thriving Port, all of which are important factors in our decision to set up in Belledune. In addition, there is a suitable workforce in the area which can suit our requirements.

*Q: What types of materials will the facility accept and treat, and how contaminated will these be?*

A: Only hydrocarbon contaminated soils and creosote contaminated soils are permitted to be accepted at the facility. Solids will consist primarily of soil, silt, dewatered sediments, sand, aggregate, stone, brick, concrete, asphalt, roots, wood, steel and other similar solid materials. Soils and solids would be contaminated with hydrocarbons such as fuels, coal tar, creosote (wood preservative), and solvents, etc. The concentration of the contaminant will vary from project to project. Our experience at the Quebec facility indicates that the majority of the hydrocarbon or creosote contaminated soil treated to date is less than 3% (30 kg contaminants in 1000 kg of soil). The Department of Environment and Local Government will determine the appropriate concentration limits for the proposed facility based on technical assessments of the proposed technology and source testing results.

*Q: Will incoming soils be tested?*

A: Soil samples will be taken at the original location of the soils, and will be tested by independent and certified laboratories using standardized methods. A comprehensive set of analysis is performed according to a "Waste Profile Questionnaire". If the analysis reveals that the soils contain material that we cannot treat, or materials that we are not permitted to treat according to our Approval, these soils will not be accepted by Bennett and will not be transported to Belledune.

*Q: Where will the incoming soils be stored?*

A: All incoming soils and solid materials, as well as all treated materials, will be stored inside a building. The building will have a ventilation system equipped with a scrubber filtration system to capture any dust and vapours generated by the handling of soil.

*Q: Who tests the treated soil before it is moved?*

A: All treated materials will be sampled prior to movement offsite. An independent certified laboratory will analyze the samples according to a predetermined set of parameters. If the analysis reveals that the soil still contains some contamination, the materials will be treated again in the process or shipped outside the province for disposal at approved facilities.

*Q: How is the contaminated soil contained during transport?*

A: Contaminated soil will be transported by truck, rail or ship, depending on where the material is coming from. No matter the type of transport, Bennett will ensure that each shipment of material is properly classified according to the appropriate American law (US EPA 40 CFR 261) and the Canadian *Transportation of Dangerous Goods Regulations* or equivalent, which will be verified by Bennett on a Waste Profile Questionnaire (WPQ). By law, all shipping manifests must be supplied to the government to be verified.

*Q: What happens to the treated soil and how clean is it?*

A: Treated soils are devoid of organic contaminants and organic material. Our Certificate of Determination from the Minister of the Environment and Local Government requires that all treated material which does not meet the Canadian limits for Agricultural Use must be shipped outside New Brunswick for disposal at an appropriate facility. Soil meeting the Agricultural Use criteria may be used as base material in a composting operation to add value or reuse the treated soil. Bennett is investigating the potential for value-added use of the other categories of organic-free treated soil.

*Q: What emissions will come from the facility?*

A: Process emissions and emissions from our storage building will be tightly regulated by the NB Department of Environment and Local Government through our Approval to Operate. In addition, emissions of contaminants will be continuously monitored using stack monitoring equipment, which will be verified by occasional manual stack sampling by independent consultants. Expected emissions at the process stack include particulate matter, carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>), total hydrocarbons (THC), and trace metals. All these contaminants will be treated by the air pollution control equipment before being released to the environment.

*Q: Belledune already has a high industrial base, and air quality is sometimes poor. Will this facility worsen air quality?*

A: Given that the facility has been designed with modern air pollution control equipment, it is not believed that it will contribute significantly to air pollution in Belledune. An Air Quality Assessment Study on the emissions from the proposed facility, conducted by independent environmental consultants, indicates that the facility will contribute very little

additional air pollution in Belledune or surrounding areas, and in most cases the contribution from the facility will be indistinguishable from current levels. The success of our business is built upon cleaning up the environment rather than polluting it.

*Q: Is it possible that the air pollution control equipment can be bypassed? What's the experience at the RSI facility?*

A: Operating experience at our RSI facility has been very good. But like any other mechanical process, failures of the air pollution control system can occur. In most cases the most likely cause of bypassing the air pollution control system through the thermal relief valve is due to power failures. Bennett has experienced thermal relief valve openings at the RSI facility in the range of 3-10 times per year, mostly due to power failures. During a thermal relief valve opening, the destruction of the contaminants still occurs in the secondary combustion chamber, but the other pollution control units are bypassed for safety reasons. These upsets are generally of a short duration of 2-5 minutes, however, an emergency generator will be installed at the Belledune facility to limit the openings to 1 minute. Ambient air quality monitors will be installed around the facility, and the data from the monitoring will be verified on a continuous basis to ensure no adverse effects to ambient air quality occur.

*Q: Will the facility pollute my well?*

A: All water from the facility will be collected, tested, and reused in the process. This includes any rainwater that may fall on the property. In addition, all solid materials, either treated or untreated, will be stored inside the storage building and therefore protected from the elements. It is therefore extremely unlikely that the facility will result in any groundwater or surface water contamination.

*Q: Will the facility affect my health or the health of my children?*

A: One of the conditions of our Approval to Proceed from the Department of the Environment and Local Government required that a Human Health Risk Assessment (HHRA) of the emissions from the facility be conducted. The study was conducted by an independent environmental consulting firm, and was peer-reviewed extensively by risk assessment experts prior to submission to government agencies for their review. The HHRA was conducted according to accepted risk assessment protocols from the United States Environmental Protection Agency, the world's leading organization in relation to risk assessment studies. The HHRA study concluded that the incremental impacts from the proposed operation of the facility would not be significant, and would not adversely affect the health of the citizens of Belledune or surrounding communities. The HHRA study is currently being reviewed by the provincial government.

*Q: What would happen if contaminated soil from one of Bennett's trucks spilled?*

A: Licensed transporters are required to have emergency spill response plans in place. They are also required to carry liability insurance that would pay for spill clean up under strict liability rules. Clean up of spilled solids are performed using conventional equipment and methods.

*Q: What happens to the treated soil exceeding the Agricultural criteria?*

A: All treated materials not meeting the CCME Agricultural Use criteria will be shipped outside the province to a licensed disposal facility.

### **We Need your Feedback!!!**

A project such as this one cannot succeed without the valuable input of the community and its representatives. If you have any questions or concerns on the project, please contact any member of the Community Environmental Liaison Committee (CELC), or:

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