

# OPTING FOR COOPERATION A VOLUNTARY APPROACH TO SITING A LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT FACILITY

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## ABSTRACT

The siting of locally unwanted facilities is one of the toughest problems facing contemporary society. The problem is pervasive and many conventional attempts to site facilities have been seriously delayed or stopped as a result of local opposition.

In Ontario, Canada, a Siting Task Force has departed from the conventional approach, has designed and is implementing a cooperative approach to siting which places social and political considerations up-front. The voluntary participation of communities is the cornerstone of the process.

Opting for cooperation is an on-going experiment. It requires a willingness to be flexible. Most importantly, it requires a commitment to be responsive to the concerns of local residents and to work with them in developing a facility that will be an acceptable part of their community. Experience thus far has been encouraging. Communities are indeed prepared to listen and participate, once they are confident that nothing is being foisted upon them and that they are truly an equal partner in the process.

## INTRODUCTION

An independent Task Force is conducting a voluntary siting process for the Canadian federal government. The objective of the exercise is to initiate a cooperative, non-confrontational siting process to find a community willing to accept a low-level radioactive waste management facility.

This paper discusses the following:

- the background to the cooperative siting approach
- the principles and safeguards of the volunteer process
- current activities of the Siting Task Force
- lessons learned and the next steps

## BACKGROUND

The bulk of the historic low-level wastes in Ontario is located in and around the Town of Port Hope, approximately 50 miles east of Toronto on the north shore of Lake Ontario.

A refinery, initially set up to recover radium and subsequently uranium, has generate low-level wastes since 1932. In the early years, municipal land fill sites and vacant land within the town were used to dispose of refinery wastes. Since 1948, process residue and other wastes were placed in two company-owned sites outside the town.

In 1975, the Atomic Energy Control Board, Canada's nuclear regulatory agency, became involved in licensing low-level radioactive waste management facilities.

By 1979, it recognized problems with two sites and gave

instructions for remedial action at one site in 1980 and ordered the company to develop decommissioning plans for the last remaining site by 1986.

In 1982, the company announced that it had begun feasibility studies to locate a single site in the Port Hope area that would accommodate the historic waste from the two company-owned sites, as well as the accumulations scattered around the town, comprising approximately 880,000 cubic meters.

In 1984, the company announced three technically promising sites for review under the Federal Environmental Assessment and Review Process. Opposition to the sites was intense and the project became a local issue in the 1984 federal election. In 1986, the Federal cabinet asked the company to drop two of the sites from further consideration and that an additional site farther from Lake Ontario be identified. Opposition remained so vehement that federal departments and agencies were forced to reconsider the issue. They concluded that the process being used for site selection was faulty. The decision was made to widen the geographic area of search, as well as to change the siting process itself. Like the siting of many other contentious facilities, the process had bogged down in hostility and antagonism. It had become unacceptably counter-productive.

In late 1986, the Minister of State for Forestry and Mines announced that he was forming an independent Task Force to advise him on an alternate, less confrontational site selection process that would not set communities and facil

ity proponents against each other. Twelve months later the Task Force delivered the final report.

The Task Force conducted an extensive literature review of the low-level radioactive waste issues and management in Canada and the United States. Three technical studies were commissioned, documenting the inventory of wastes in Ontario, waste management options and transportation costs. Visits were made to a number of operating sites.

To understand the issues involved in the siting process from the proponent's viewpoint, round table discussions were held with key representatives from other siting processes. The Task Force was especially encouraged by the recent success of the Alberta Government to site a hazardous waste management facility in their province.

Throughout its work, the Task Force recognized that social and political issues involved in siting activities can be pivotal and are often more difficult to resolve than technical issues. For this reason, members made it one of their primary objectives to better understand the perspectives of those concerned with or affected by siting processes. Consequently, one-on-one discussions, workshops and site visits were carried out with a broad range of citizens, municipal officials, regulators, experts and public interest groups. Here is what the Task Force heard:

- consultation is too little too late
- citizens want some control over what happens in their own community
- there is a lack of trust of government and experts
- inequity exists between those who benefit and those who live near the facility
- opposition often results from the perceived risks and stigma of an unwanted facility

The Task Force also discovered that public involvement in the management of environmental impacts and socio-economic concerns was often relegated to a secondary level of importance. Typically proponents conduct feasibility studies with limited public involvement, decide on a course of action and make a public announcement. The proponent would then find himself in a position of having to defend what may be a good technical decision in the face of public hostility. The Task Force characterized this as the 'Decide, Announce, Defend (DAD)' syndrome which results in a defensive justification of top-down technocratic decision-making.

In designing a new, more cooperative siting process, the Task Force recognized the need to give interested communities more control over facility planning and decision-making and to ensure that the needs and concerns of the community have priority in the siting process. The new process differs from the traditional in that socio-economic issues are identified early, before expensive site character-

ization begins, and resolved jointly through a consensus building approach with the community.

### PRINCIPLES AND SAFEGUARDS OF THE COOPERATIVE PROCESS

In December of 1987, the Task Force published its report, entitled "Opting for Cooperation". It defined specific principles and safeguards as the cornerstone of a cooperative siting process. These are described below. In addition, the Task Force identified a number of issues specifically associated with radioactive waste management that required attention. These included:

- a categorization of wastes which would lessen public confusion and facilitate effective management;
- a shift in emphasis from permanent disposal to include long-term management with attention to monitoring and retrieval capability;
- improved short-term management as a first step towards longer-term solutions; and
- recommendations regarding regulatory procedures and practices.

The Task Force was asked to develop a process that is based on cooperation rather than confrontation. To do this, it developed principles and safeguards that were incorporated into the process. Following are the five principles:

**1. The community should volunteer and have the right to opt out of the process at any time, rather than be selected by the project sponsor at its discretion.**

This principle moves away from the approach of imposing a technical decision on a community and the 'Decide, Announce, Defend' syndrome, which is inherently confrontational.

The next three principles aim to reinforce and support the voluntary approach.

**2. The community should be a partner in problem-solving and decision-making throughout the process.**

The aim of the Task Force is to ensure that any community that volunteered maintained a strong element of control in the process. The community should have equal say, along with technical experts, in determining the kinds of studies that should be carried out and the factors that should be considered. Any information developed to aid decision-making must address the community's concerns, issues and desire to know.

A key feature of this process is that co-planning occurs between the Task Force and the community. There is no proponent as such advocating for a certain kind of undertaking. This has both advantages and disadvantages. Early on it may be a disadvantage where the community quickly organizes against volunteering before the Task Force has the opportunity disseminate the

facts. In the long run, the lack of a proponent may be an advantage because it allows the community to work jointly with the Task Force to reach a mutually acceptable solution.

**3. The community should receive compensation to offset unmitigable impacts and to enhance local benefits.**

The Task Force believes it is only fair to compensate the community for inequities in the distribution of costs and benefits. Impacts and risks are localized while the benefits of improvement management will be enjoyed by the broader public. The aim should also be to ensure that the community is better off as a result of its decision to accept the facility.

The Task Force does not accept the assumption that expending more effort and money on impact mitigation somehow negates the need to address the imbalance of costs and benefits that inevitably accompanies siting decisions. Even with the best of mitigation there will be impacts that cannot be avoided or reduced to acceptable levels. These should be compensated by both financial and non-financial means.

The Task Force recognized that the concept of compensation and leaving a community better off by accepting the facility might be seen by some as a bribe.

Such accusations (and there have been some) have been answered by indicating that a bribe is something offered as an illicit payment and that it induces a betrayal of trust. The "reward" proposed in this process is well deserved. It is an explicit component of the impact management guidelines. Thus the measures and limits are clearly and openly specified. Where the potential risks and impacts are made known and safety standards assured, then there is little potential for abuse.

**4. The community should have the right to select, from given technical options and impact management measures, the ones that are acceptable to it.**

The Task Force wanted to ensure that technical and impact management decisions were fully responsive to the community's needs and preferences. It believes the best way to do this is to give the community the right to make such choices. The Task Force recognizes that allowing a community to choose among various technical options would be costly. Some may want more engineering than necessary for an added level of comfort. The Task Force has made it clear that fiscal responsibility is necessary and that a balance will have to be made between mitigation and compensation. Principle number 5 also addresses this concern.

**5. The Siting Task Force responsible for the implementation of the process must ensure that the safety of the**

environment and human health are not compromised for any reason.

The overall aim of the process is to make facility siting more cooperative but not at any cost. When the facility is complete, it must be safe. It must be sited in an environmentally acceptable manner. No one will be served if safety is compromised.

The Task Force believes that these five principles go a long way toward making the siting process more cooperative. It is also recognized that, unless there are safeguards, a facility siting process that aims for the voluntary participation of local communities could be labelled as "locational opportunism" and might be seen as attempting to exploit economically disadvantaged communities. To guard against this, the following safeguards were developed:

**1. An explicit, up-front impact management policy will be used to ensure that all communities are aware of the range of options available to them.**

This safeguard insures, at the outset, that all communities interested in volunteering for the facility are equally and fully informed about the kinds of compensation and other impact management measures available to them. In this regard, Impact Management Guidelines were prepared and made available to all interested communities at the outset of the siting process.

**2. Community - selected advisors will be employed to ensure that local interests are protected in the process of joint fact-finding and problem-solving.**

The Task Force recognized that the capabilities of communities will vary depending on population and staff resources. No community should be disadvantaged due to lack of sufficient advice nor should they be compelled to use consultants whom they feel may not represent their interests.

**3. Thorough site and technology assessments designed jointly by the community, the Siting Task Force and technical experts will be carried out to ensure that decisions are based on full information.**

The Task Force will ensure that decisions are based on "informed consent" and full information about positive and negative implications of the facility.

**4. A broad-based Community Liaison Group will be established to work with the Siting Task Force and local officials.**

While Municipal Council is the decision-maker of record for the community, a Community Liaison Group, exclusive of Council, is established to facilitate information sharing, consultation and to determine consensus. This group receives its funding and technical resources from the Task Force and advises Council and the Task

Force whether there is sufficient social consensus in the community to take the next step in the process.

#### **5. Funding will be provided to allow for community participation in the process.**

To reinforce the fourth safeguard, the Task Force recognizes the need to provide residents with resources so that they can in fact participate in the process. Funds are provided for such things as a local office, secretarial support, photocopying and mailing. Because the process aims to be non-adversarial, the Task Force will not fund duplicate studies or litigation.

These principles and safeguards were reported in "Opting for Cooperation" and approved by Federal Cabinet in the summer of 1988. On September 30, 1988, the Minister of Energy, Mines and Resources Canada announced the establishment of a new Task Force to initiate the cooperative process summarized in Figure One.

Five of the original members were re-appointed, with the addition of one new member. In the news release the Minister said,

"I believe that such a socially responsible approach to facility siting will encourage communities to participate in the process. Since the process is entirely voluntary and no community will be selected against its wishes, I believe communities will want to be informed about the siting process, its principles and safeguards, and the role which they could have in the solution."

With the broad support of government and interested observers, the Task Force was confident they were working from a firm and fair base.

#### **INITIATING THE COOPERATIVE SITING PROCESS**

The cooperative process, which consists of five distinct phases, moves from the appointment of a Siting Task Force and the development of basic guidelines, to site and technology selection and community endorsement of impact management agreements. A Board of Directors will be appointed to oversee the construction and operation of the facility (Fig. 1).

The present Task Force has a mandate to complete Phase Three. It must then report back to the government with details of interested communities, feasible waste management options and cost implications.

##### Phase One - Establishing Guidelines

When the Siting Task Force was established, they purposely challenged the process, rethought concepts and developed a work plan for initiating the process. Without question, there was a great deal of work to be done in a short period of time. Initially the staff support (Secretariat) was

not properly resourced. It soon became apparent that more staff was required.

The first major activity of the Task Force was the drafting of guidelines in preparation for the public information and consultation phase of the process. Safeguard number one refers to the need for an explicit impact management policy so that all communities could start on the same level playing field. The Task Force recognized the need for similar guidelines for a number of issues that would be important in the early stages of the process. Following is a list of guidelines developed through a series of workshops and discussions with government agencies, siting practitioners, citizen groups and community representatives:

- Impact Management Guidelines
- Site Elimination Criteria
- Funding Guidelines
- Community Liaison Group Guidelines

In addition to the informative benefit of the guidelines, the exercise was extremely valuable in forcing the Task Force to think through a number of factors not previously fleshed out. For instance, it was essential to define the word "community" before the Community Liaison Group Guidelines could be developed. It was necessary to distinguish between the municipality or group of municipalities who may choose to volunteer into the process, and the potentially affected neighbouring communities or those along the transportation route.

The Task Force recognized that it would be working with three types of communities, the volunteer community, the source community (areas where waste is presently located) and access route communities.

Once the definition of community was clearly defined, the purpose, mandate, tasks and procedures for the formation of Community Liaison Groups became easier to develop.

The Task Force took a thoughtful, seemingly slow approach in the initial steps in the belief that careful and rigorous application of the process would win the day. Temptations to jump too soon into communities who wanted to advance the process were resisted.

##### Phase Two - Regional Information Sessions

Although there was some discussion to limit the geographic area of search for a suitable low-level radioactive waste management site, the Task Force asked to open the process to the whole province to ensure that no region felt it was being targeted. To facilitate such a large undertaking, it was necessary to stage the information and consultation activity. Ontario is divided into a number of regional areas for administrative and management purposes with identi-

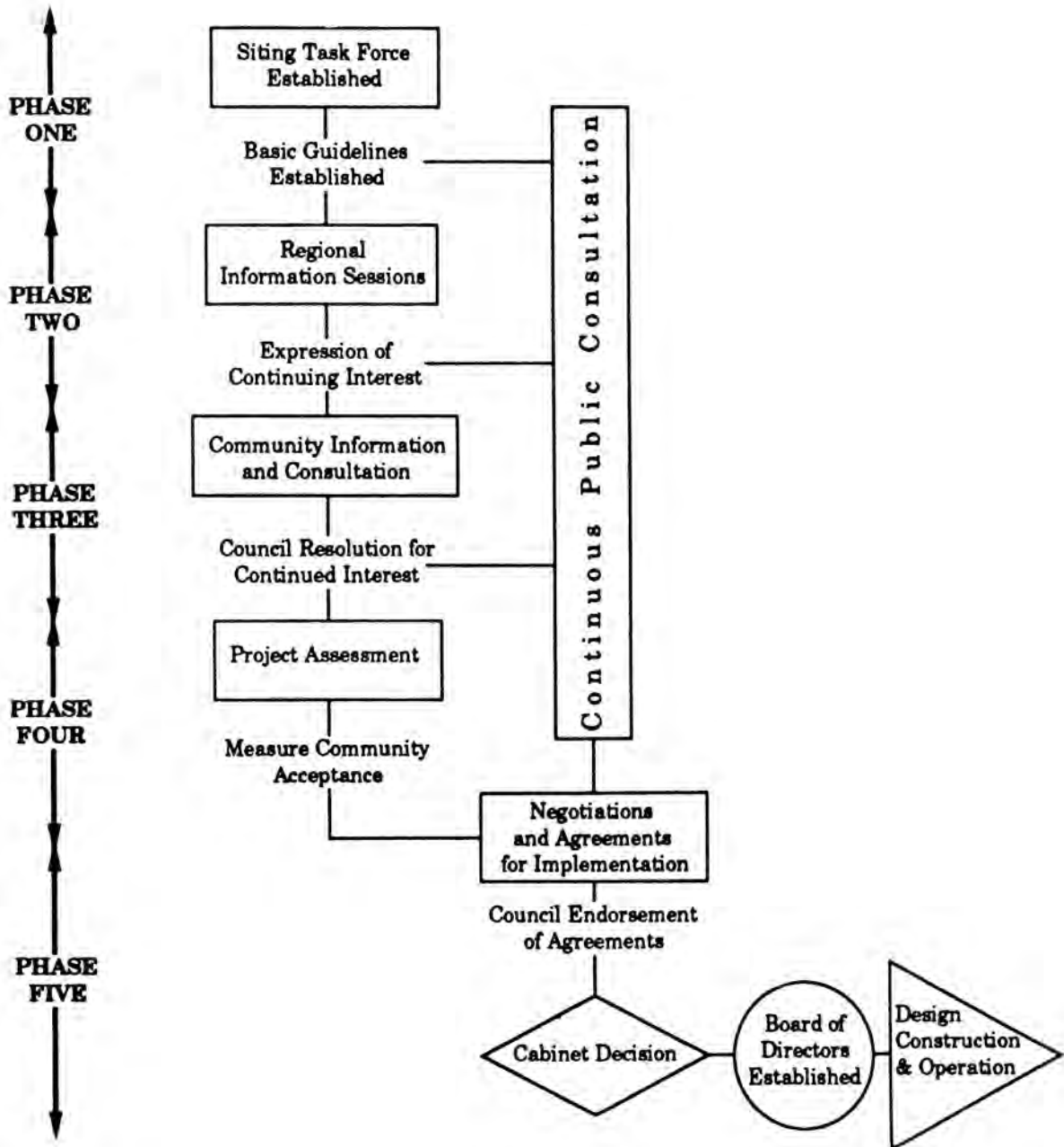


Fig. 1. A Co-operative Siting Process.

fied regional centres. These centres were used for the first round of information meetings.

For these meetings, the Task Force prepared the following:

- a communication strategy;
- modules, to be prepared by each Task Force member, to explain the waste problem, the cooperative process and how communities could become involved;
- an information kit containing twelve fact sheets and the draft guidelines;
- a fifteen minute audio/visual presentation to complement the introductory presentation to the process.

In addition, a detailed plan for addressing the media was prepared and extensive pro-active advance media relations were conducted to inform the media of the Siting Task Force and to convey the central "themes and messages".

All 850 Ontario municipalities were sent an invitation to attend one of the eight Regional Information Meetings scheduled for their area. It is interesting to note that 245 people pre-registered but 370 showed up, which reflected the interest in the voluntary approach. It should also be noted that travel expenses of the municipal officials attending these sessions were paid by the Task Force in keeping with the policy that no municipality should be out-of-pocket by participating in the process.

#### Phase Three - Community Information and Consultation

As a result of these Regional Information Sessions, 26 communities requested the Task Force to hold initial information meetings in their communities. Five of these communities withdrew their request before the information meeting, seven communities withdrew immediately after the meeting, and fourteen expressed a continuing interest in the process and formally requested that a Community Liaison Group (CLG) be established.

The cooperative siting process requires that interested communities pass a resolution of Council requesting the task Force to establish a CLG who, with the assistance of the Task Force, lead the community in an information and consultation program. The CLG is formed to represent the broad interest in the community, both positive and negative. While elected municipal officials are not permitted to be CLG members, they, like other interested groups, can nominate members.

The Task Force recognizes the need for accurate information in siting processes, especially matters relating to health and safety issues of low-level radioactive waste. Since the concept of "informed consent" is based on accurate information and the building of trust, the Task Force devel-

oped a series of information packages to assist the CLGs in getting information out to the community.

The Task Force also requires that all CLG meetings be widely advertised and open to the public to avoid any perceived "back room" dealings.

Six information packages, listed below, called modules, have been developed using slides, overhead transparencies and printed material to assist the consultation program. An effort was made to have these modules delivered by individuals expert in their field and, where possible, individuals seen to be unbiased.

1. Workshop to initiate the Community Liaison Group - delivered by the assigned Task Force member
2. Radiation, wastes and health and safety consideration - delivered by the Canadian Institute for Radiation Safety
3. Waste management technologies -delivered by an independent consultant
4. Health and safety and regulatory requirements - delivered by staff member of the Atomic Energy Control Board
5. Site elimination criteria - delivered by the Task Force/Secretariat team
6. Environmental Assessment and Addressing Impacts -delivered by the Task Force/Secretariat team

At the time of preparing this paper, the first four modules had been presented in ten of the interested communities.

Each CLG has elected a chairperson. A facilitator has been retained from the local community and a Task Force/Secretariat team is available to advise them in process matters and to assist with the consultation program.

To gain a broad perspective of the issues, communities are encouraged to bring in guest speakers of their choice to address issues on low-level radioactive waste.

Each CLG has developed an extensive information and consultation program using a wide range of techniques including:

- an office in a central location where citizens can drop in to obtain information,
- newsletters,
- direct meetings,
- video tape of meetings with showings on cable T.V.,
- talks to service clubs and high schools,
- newspaper articles,
- radio talk shows

In addition, representatives from all fourteen CLGs and one member of each Council were taken on a weekend

tour of the Port Hope area, the source of most of the historic waste. They also visited a low-level radioactive waste facility in Lewiston, New York, where the United States Department of Energy and Bechtel National Inc. hosted the tour. At each location, guests had the opportunity to talk to local citizens, elected officials and site managers to obtain first hand facts about waste management. They also had the chance to network amongst themselves to compare notes. Seeing the wastes and a managed facility and listening to the experiences of the people involved has been the single most helpful information technique.

The process has had its share of controversy and opposition. One community assembled 8,600 signatures, from a total community population of 11,300, on a petition in very short order soon after the initial information meeting. As a result, Council withdrew from the process.

Community response to the siting process has been better than expected. While it is gratifying to have fourteen communities, given fiscal constraints, Cabinet will be unwilling to move forward with so many in the process. As a result, criteria are being developed to assist with the decision as to which communities should enter the next phase where large sums of money will be spent on detailed environmental assessment, site characterization and technology selection.

#### LESSONS LEARNED TO DATE

At this point in the process, a number of observations can be made.

- From the outset, the rules must be clear and consistent in their application with all communities.
- A well-thought-out process is necessary so that the community knows what to expect.
- While the principles and safeguards of the process are highly regarded and strictly applied by the Task Force, flexibility is essential in carrying out the process. This includes:
  - flexibility in resources (one never knows whether four or fourteen communities will volunteer);
  - flexibility in when and how specific activities are carried out;
  - adapting to the pace of the community as much as time allows;
  - addressing the community agenda first - even though you may have an important issue to discuss, listen to theirs first.

- The time and effort in publicly developing the process, and obtaining the blessing of the process from a wide range of citizens, practitioners, regulators and interest groups, was time well spent. While the Task Force has been challenged on specific points, no one has seriously challenged the cooperative approach and the key elements of the process.
- While there was a great deal of discussion about whether municipal officials should be members of the Community Liaison Group, the decision to restrict them has been a positive step to this point in the process.
- There should be a well advertised cut-off date for those communities intending to express an interest in the process. Late entry into the process places additional demands on resources.
- Information packages prepared jointly with the community may have more credibility and appear less biased than if prepared in advance by the Task Force.
- Regular joint meetings with all community chairpersons and facilitators are important for sharing experiences and resolving mutual problems.
- Some people may find that the process is not cooperative but competitive. It is in fact both. It is cooperative in that communities are not being forced to participate and decisions are made jointly. It is also competitive in that more than one community is likely to volunteer. However, unlike conventional siting processes, this competition is positive rather than negative.
- God gave us two ears and one mouth which is a subtle hint that we should listen more than we speak. This has special application in the cooperative siting process.

#### THE NEXT STEPS

At the end of Phase Three, the Community Information and Consultation Phase, the Task Force is required to report to Federal Cabinet on:

- the process achievements
- the profile of volunteer communities interested in continuing in the process
- the terms of reference for negotiations with the volunteer communities
- recommended disposal options
- costs of implementing the defined options with communities.

It is planned to deliver this report in August of 1990.

The Community Liaison Groups are required to deliver

their reports by April 30, 1990 which will give the Task Force three months to prepare its report to Cabinet. Cabinet then must decide which communities will enter Phase Four and whether or not to extend the mandate of the Task Force to complete the process.

This paper has attempted to provide the background and rationale that led to the appointment of the Siting Task

Force. The principles and safeguards have been highlighted, which are the cornerstone of the cooperative process. A progress report was also provided on the initiation of the siting process.