

Stelco's Virtual Consultation Event #1

Terms of Reference

Environmental Assessment (EA) of the Proposed Quarry Landfill Expansion - Stelco Lake Erie Works, Nanticoke

WE WANT YOUR INPUT!

You are invited to browse or listen to the Terms of Reference consultation material. Please fill out a comment form so that we can include your questions or comments in the EA document. We will provide a written response to all comments received.



The Steel Company of Canada

ENVIRONMENTAL ASSESSMENT

An Environmental Assessment (EA) of the Proposed Quarry Landfill expansion is being undertaken under the provincial *Environmental Assessment Act*.

As part of the EA Study, Stelco will: evaluate 'Alternatives To' the proposed landfill expansion, identify the preferred 'Alternative To', characterize the existing environmental conditions, identify and develop 'Alternative Methods' of landfill expansion, compare alternatives and identify the preferred 'Alternative Method', identify mitigation measures and determine net environmental effects.

This consultation is specifically related to preparation of the Terms of Reference that will guide the Environmental Assessment. The intent of the consultation is to share information with the community and receive your feedback regarding our proposed framework for the EA process.

Additional public consultations will take place at a later date to afford the community opportunity to comment on the Project in greater detail.

LOCATION OF EXISTING LANDFILL

The location of the existing landfill (the Site) is shown below.



WHAT IS THE TERMS OF REFERENCE?

The Terms of Reference (ToR) sets out the framework for the planning and decision-making process to be followed during the preparation of the EA.

A ToR is not an EA. It outlines what work and studies will be done during the EA stage. Stelco does not need to do the work or the studies at the ToR stage.

The ToR process commenced June 30, 2021.

WHAT IS THE ENVIRONMENTAL ASSESSMENT?

The EA is a study, which assesses the potential environmental effects (positive or negative) of this proposed landfill expansion.

DID YOU KNOW?

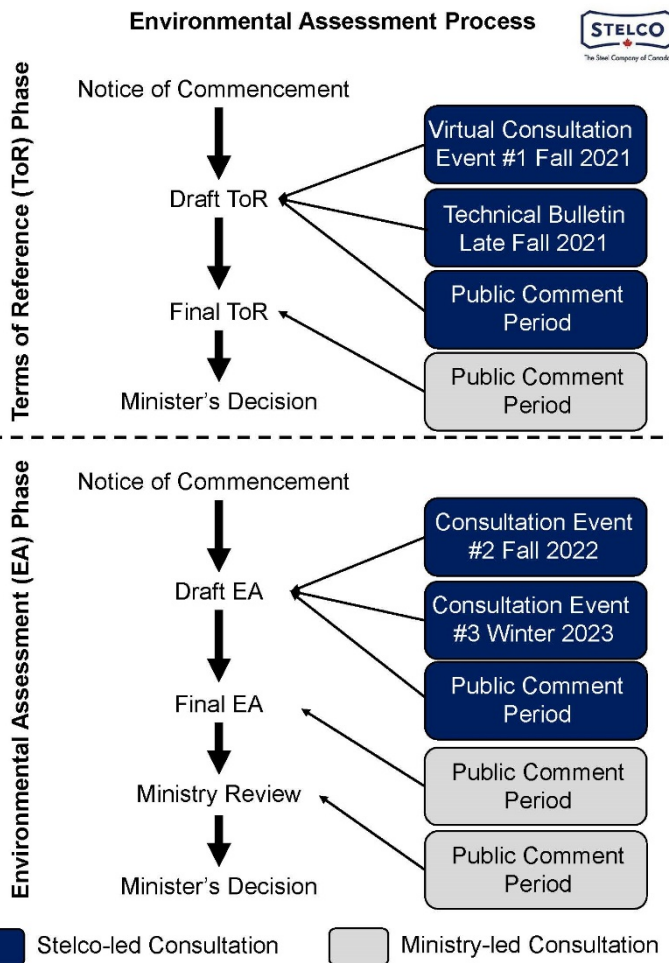
The purpose of this EA is to provide environmentally safe and cost-effective long-term waste management for Stelco for a 15 to 25 year planning period.

The planning period will be better defined during the EA.

EA PROCESS AND CONSULTATION

NEED FOR LANDFILL EXPANSION

- There is limited approved disposal capacity remaining at the existing landfill.
- Stelco is proposing to expand the existing landfill at LEW to accommodate the continued on-site disposal of non-hazardous steelmaking secondary materials generated at the facility that cannot be reused or recycled.
- Also will consider the potential disposal of historical non-hazardous steelmaking secondary materials from its Hamilton Works site (“HW”), located approximately 70 km from the Site.
- The size of the expansion will be defined during the EA.

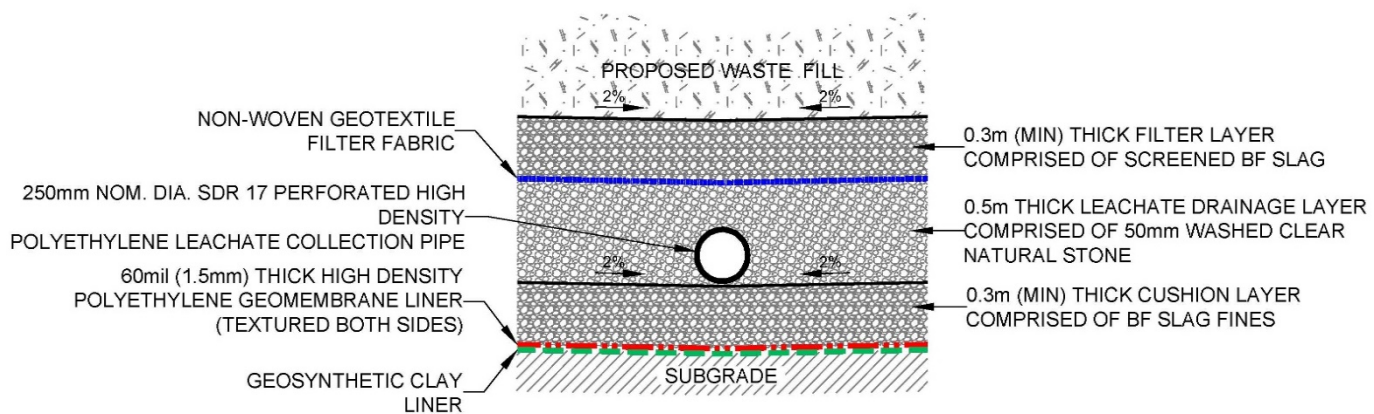


CONSULTATION PLAN

- A consultation plan to support this EA has been developed including identification of stakeholders (government reviewers and public) as well as interested Indigenous Communities, along with planned consultation events highlighted in the flow chart above.
- For the ToR, key decision-making milestones include identification of environmental components, 'Alternatives To' and their assessment (see pages 6 and 7 of this virtual Consultation Event).
- Issues identified will be reviewed by Stelco and Golder and a reasonable effort will be made to respond to concerns raised throughout the planning process. Stelco and Golder will attempt to resolve all issues or disputes to reach a resolution that is amenable. When a mutually agreeable resolution cannot be achieved, the matter will be referred to the Ministry of Environment, Conservation and Parks (MECP) for guidance.

THE EXISTING LANDFILL

- Situated in a 5.5 hectare, 34 metre deep former limestone quarry at the west end of the Lake Erie Works Facility (LEW).
- Landfilling commenced in 1984 with permission from the Ministry of Environment and consisted of blast furnace slag only until the end of 2011.
- In 2012 a new engineered landfill cell was designed within the northern portion of the landfill.
- The engineered landfill cell was designed with a liner and leachate collection system. Leachate is the liquid that is generated from the waste as rainwater travels through the waste or if groundwater enters the landfilled waste.
- Waste in the new cell consists of various steel making secondary materials from the Lake Erie Works Facility that has limited reuse potential, such as ironmaking and steelmaking sludges, and baghouse dusts.
- The design of the new engineered cell is in accordance with the requirements of the MECP, 2012 Landfill Standards as shown below.



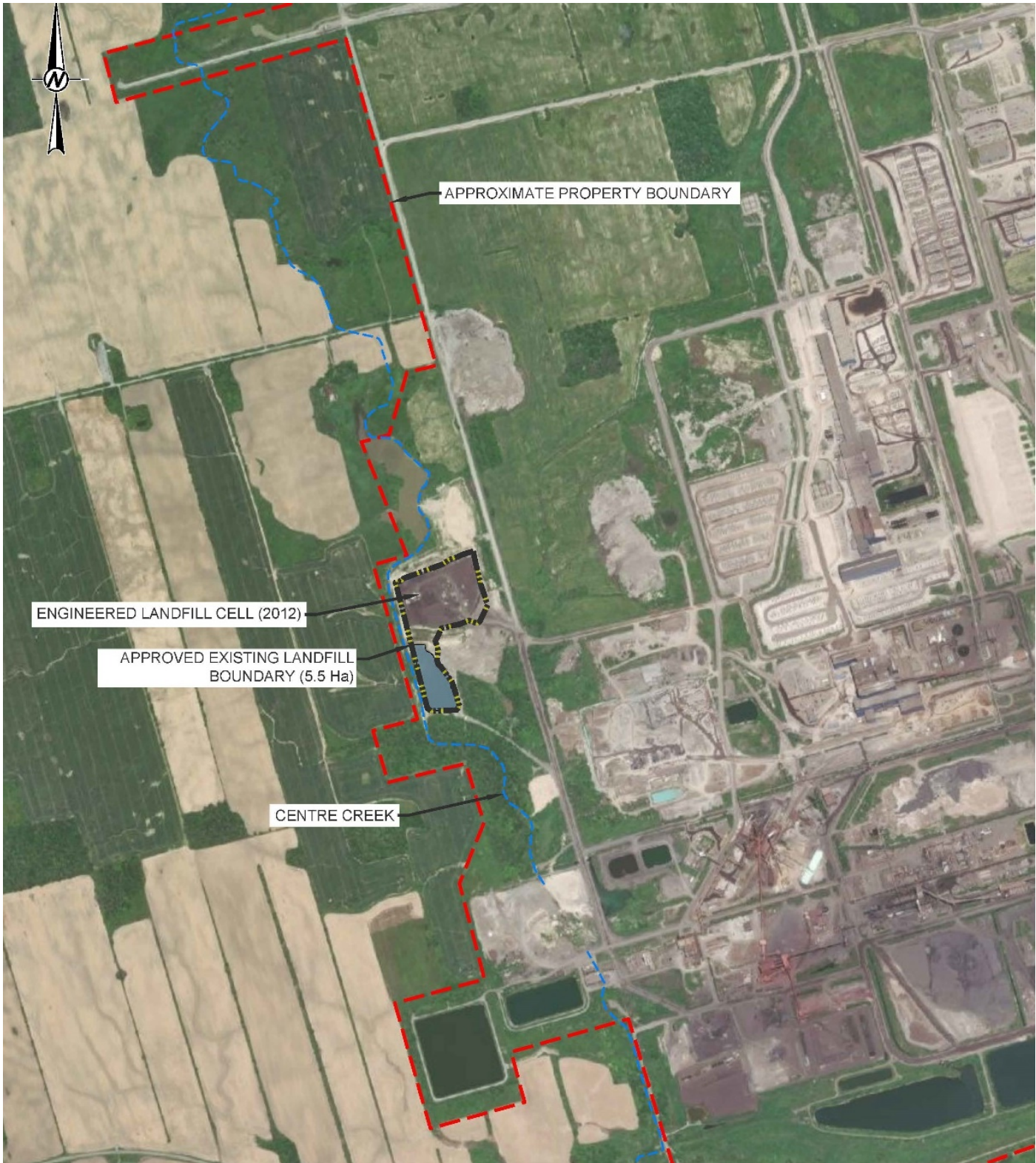
- Existing approved landfilling capacity is 1,300,000 cubic metres.
- Annual fill rate in recent years is approximately 18,200 to 54,800 cubic metres per year.

EA PROCESS TIPS

The Environmental Assessment process requires the study to consider an option to “Do Nothing” along with the list of options being considered in the study.

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WHAT ENVIRONMENTAL COMPONENTS ARE RELEVANT TO 'ALTERNATIVES TO'?

Environmental components are used to assess potential effects of alternative ways that the landfill expansion Project could be implemented. Environmental components comprising the natural, social, economic / financial and technical environment are proposed as follows:

- Atmosphere (air quality and noise)
- Geology and hydrogeology
- Surface water
- Biology (aquatic and terrestrial ecosystems)
- Agriculture and land use
- Cultural heritage (archaeology, cultural heritage landscapes and built heritage resources)
- Socio-economic (off-site nuisance such as noise and visual)
- Transportation (road network)
- Technical considerations (ability of Stelco to operate, timing of approvals, cost of implementation)

WHAT ARE 'ALTERNATIVES TO'?

'Alternatives To' are functionally different ways of approaching and dealing with the problem or opportunity (which is to provide environmentally safe and long-term waste management).



This is a photo of the 2012 engineered landfill cell under construction.

ALTERNATIVE TO #1: Landfill Closure and Export of Waste for Disposal *



- Continue diversion activities at the Site
- Close the existing landfill
- Send waste for off-site disposal



ALTERNATIVE TO #2: Landfill Site Expansion



- Obtain approval from the MECP for an increase in the disposal capacity of the existing landfill Site (EA required)
- Continue to provide diversion and disposal services for Stelco-related waste



ALTERNATIVE TO #3: Establish New Landfill Site at a Different Stelco Property or a New Property



- Obtain approval to establish a new landfill (EA required)
- Close the existing landfill
- Stelco's other property, HW, is not suitable for a new landfill
- Stelco does not own additional property for establishing a new landfill



ALTERNATIVE TO #4: Alternative Waste Management Technologies



- Obtain approval to establish a facility such as an energy from waste facility at LEW or a new location (Environmental Assessment required)
- Close the existing landfill
- Stelco is not in the waste management technologies business and doesn't have the technical knowledge to operate such a facility



ALTERNATIVE TO #5: Waste Diversion **



- Stelco currently diverts a significant percentage of waste
- Recycle blast furnace slag to the cement sector, recycle coarse Basic Oxygen Furnace slag for internal reuse, etc.
- Alternative does not have the ability to fully address the stated problem



ALTERNATIVE TO #5: Do Nothing



- Close the existing landfill
- To be considered in the evaluation of 'Alternatives To' as a benchmark
- Does not resolve the long-term waste management problem



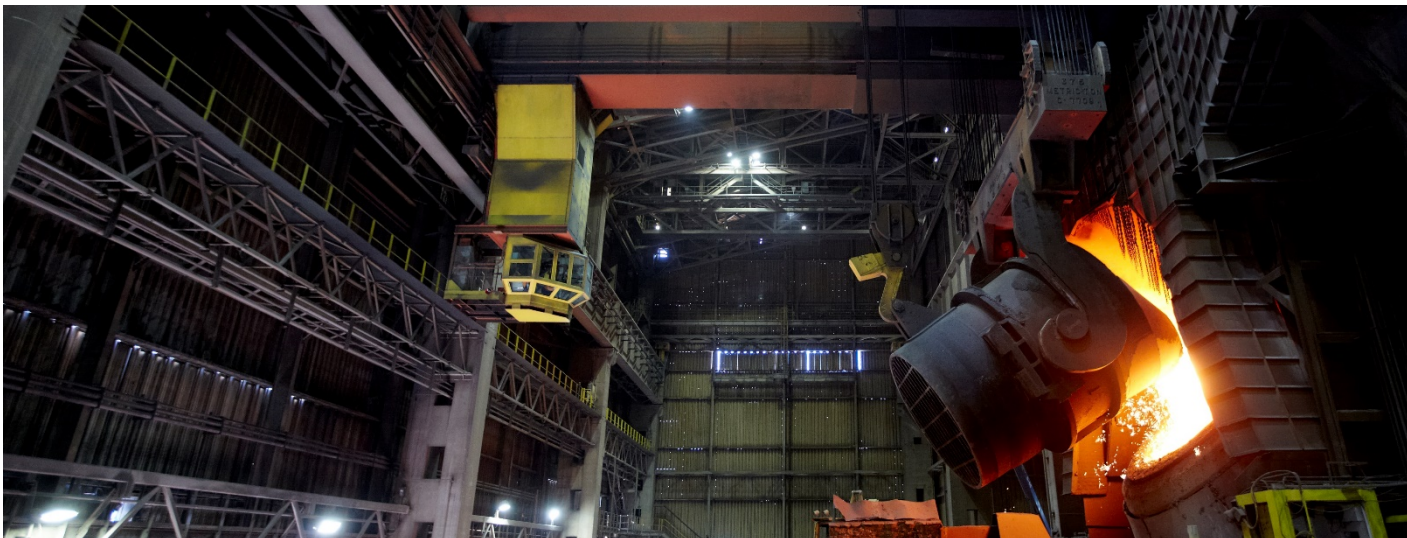
* All municipal landfills within 100 km of LEW either could not accept the waste due to conditions within their Environmental Compliance Approvals that restrict their service area from which to receive waste or type of waste to receive, or they didn't want to as they preferred to conserve disposal capacity for their municipalities. Some private landfills have responded to inquiries saying they do not want to accept steelmaking residual waste due to incompatibility with their existing leachate treatment facilities or they are reserving capacity for existing clients. Some private landfills would be willing to accept this waste.

**Stelco will continue to divert as much material as possible from disposal, but it does not fully address the stated problem.

A comparison of viable 'Alternatives To' will be required and the following environmental components, evaluation criteria and indicators are proposed.

Environmental Component	Evaluation Criteria	Indicator(s)
Atmosphere	<ul style="list-style-type: none"> • Potential effects on air quality (including dust and greenhouse gas) • Potential noise effects 	<ul style="list-style-type: none"> • Qualitative amount and/or type of emissions generated/offset due to alternative. • Qualitative amount of non-renewable resources conserved. • Qualitative expected amount of noise from alternative.
Geology and Hydrogeology	<ul style="list-style-type: none"> • Potential effects on off-site groundwater resources 	<ul style="list-style-type: none"> • Qualitative expected effect on groundwater quality at the property boundary.
Surface Water	<ul style="list-style-type: none"> • Potential effects on surface water resources 	<ul style="list-style-type: none"> • Qualitative expected effect on surface water quality and/or quantity within the site-vicinity.
Biology	<ul style="list-style-type: none"> • Potential effects on natural environment features (aquatic and terrestrial ecosystems) 	<ul style="list-style-type: none"> • Qualitative amount of disturbance of terrestrial and/or aquatic environment.
Agriculture and Land Use	<ul style="list-style-type: none"> • Potential effects on existing land use and agriculture 	<ul style="list-style-type: none"> • Approximate number or types of land use conflicts.
Cultural Heritage	<ul style="list-style-type: none"> • Potential effects on archaeology • Potential effects on cultural environment (cultural heritage landscapes and built heritage resources) 	<ul style="list-style-type: none"> • Approximate degree of archaeological potential. • Approximate degree of potential for cultural heritage landscapes/built heritage resources.

Environmental Component	Evaluation Criteria	Indicator(s)
Socio-economic	<ul style="list-style-type: none"> Potential site operational effects on sensitive off-site receptors (i.e., noise, visual) 	<ul style="list-style-type: none"> General attitude of public toward alternative. Approximate proximity of alternative to potential off-site sensitive receptors.
Transportation	<ul style="list-style-type: none"> Potential effect on road network 	<ul style="list-style-type: none"> Qualitative assessment of additional tonnage and resulting number of trucks to site due to selected alternative.
Technical Considerations	<ul style="list-style-type: none"> Relative ability of Stelco to operate Relative technical risks associated with the operation of the alternative Relative costs and timing of approvals Relative cost of implementation (capital and operational costs) 	<ul style="list-style-type: none"> Availability of examples where technology used with similar types of waste and tonnage. Types of barriers to implementation. Approximate cost per tonne. Anticipated types of approvals required for alternative and level of effort to attain the approvals.



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NEXT STEPS

- Collect feedback from stakeholders from virtual Consultation Event #1 on the need for the landfill expansion, proposed components of the environment to consider, 'Alternatives To' proposed, methods to evaluate 'Alternatives To' and the consultation plan.
- Complete high-level description of the existing environment.
- Complete assessment of 'Alternatives To'.
- Update the projected secondary materials quantity for disposal.
- Prepare technical work plans for the environmental components to further describe the existing environment, compare 'Alternative Methods' and detail the impact of the Project for use in the EA.
- Prepare Technical Bulletin #1.
- Prepare the Draft ToR.

WHAT ARE 'ALTERNATIVE METHODS'?

'Alternative Methods' are different ways of doing the same activity (i.e., landfill expansion). These will be developed during the EA.

WHAT ARE WORK PLANS?

Work plans are a summary of how different environmental component teams will study the environment to compare 'Alternative Methods' and will assess impacts of the proposed Project.

NEXT CONSULTATION ACTIVITIES

Technical Bulletin #1: final results of the 'Alternatives To' assessment, describe the proposed work plans to be used by each environmental component team to assess existing conditions, compare 'Alternatives To' and detail the impact of the Project for use in the EA.

Draft ToR: a summary document of the proposed Project, the need or rationale, environmental components considered, the existing environment, 'Alternatives To', how the 'Alternatives To' were considered, consultation undertaken and the results, future consultation during the EA, work plans for the EA and ToR commitments.

We will post information on the project website as it becomes available: <http://consultation.stelco.com>

QUESTIONS, FEEDBACK AND COMMENTS?

We encourage you to let us know your thoughts by sending your comments to consultation@stelco.com and/or using the attached comment form by November 28, 2021.

Or contact us at 1-905-577-4407 for any accessibility requirements.

If you would like to be notified of any Project updates, please let us know and provide either an email address or your mailing address

