

3236 River St. P.O. Box 28  
Alvinston, ON N0N 1A0

Phone: 519.898.2173  
Fax: 519.898.5653



August 22, 2025

Municipality of Village of Burk's Falls  
102 Ontario Street  
PO Box 160  
Burk's Falls, ON

RECEIVED

AUG 25 2025

TOWNSHIP OF ARMOUR

At the August 13, 2025 regular session of Council, the following motion was duly moved and seconded:

**RESOLUTION-2025-236**

Councillor Craig Sanders made a motion that the Municipality of Brooke-Alvinston supports the request from the Village of Burk's Falls to request that the Province of Ontario immediately suspend the approval and development of all new BESS installations until a comprehensive, science-based study is completed. Deputy Mayor Frank Nemcek seconded the motion.

Carried

If you require further information, please contact by phone or email  
[jdenkers@brookealvinston.com](mailto:jdenkers@brookealvinston.com).

Kind Regards,

Darlene Paolucci  
Administrative Assistant

## Charlene Watt (Deputy Clerk)

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**From:** Ashley Soundy (Administrative Assistant)  
**Sent:** August 15, 2025 8:58 AM  
**To:** Charlene Watt  
**Subject:** FW: NEW Township of Armour website inquiry!

Kind Regards,

*Ashley Soundy*

*Administrative Assistant/Finance Clerk*

Township of Armour  
56 Ontario Street  
P.O. Box 533  
Burk's Falls, ON P0A 1C0  
(705) 382-3332  
[admin@armourtownship.ca](mailto:admin@armourtownship.ca)  
[www.armourtownship.ca](http://www.armourtownship.ca)



**From:** no-reply@myclientfirstwebsite.com <no-reply@myclientfirstwebsite.com>

**Sent:** August 14, 2025 9:53 PM

**To:** Ashley Soundy (Administrative Assistant) <[admin@armourtownship.ca](mailto:admin@armourtownship.ca)>

**Subject:** NEW Township of Armour website inquiry!

Form response notification

You've received the following form submission from the Contact Form form on the CONTACT page of your website - <https://www.armourtownship.ca>.

**Full Name:** Greg Tudin

**Phone Number (optional):**

**Email Address:**

**How Can We Help You?:** Battery storage facilities—especially large-scale Battery Energy Storage Systems (BESS)—play a vital role in modern energy infrastructure, but they come with a range of risks and dangers that need to be carefully managed. These can be grouped into technical, environmental, safety, and operational risks.

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### 1. Fire and Thermal Runaway

This is the most well-known and serious risk associated with battery storage.

- Thermal runaway occurs when a battery cell overheats, triggering a self-sustaining reaction that can spread to neighboring cells.
- This can lead to fires or even explosions, especially in lithium-ion battery systems.

- Fire suppression is difficult—lithium fires can't be extinguished easily with water or standard methods.

Examples:

- The 2020 fire at a BESS facility in Arizona injured several firefighters.
- The Tesla Megapack fire in Victoria, Australia (2021) burned for three days.

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## 2. Toxic Gas Emissions

In the event of overheating, short circuits, or fires:

- Batteries can emit toxic gases like hydrogen fluoride (HF), carbon monoxide, and other volatile organic compounds.
- These gases are harmful to humans and the environment and may require evacuation zones or special protective equipment for emergency responders.

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## 3. Electrical Hazards

- High-voltage systems carry the risk of electric shock, arc flashes, or electrical fires during maintenance or system failure.
- Poor grounding, design flaws, or improper isolation procedures can exacerbate risks.

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## 4. Environmental Impact

- In case of battery leakage or fire suppression runoff, hazardous chemicals can enter the soil or water supply.
- Battery manufacturing and disposal also have long-term environmental consequences if not managed responsibly.

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## 5. Explosion Risks

- Enclosures that aren't properly ventilated can accumulate flammable gases, which may explode if ignited.
- This is particularly relevant for hydrogen gas produced in some battery chemistries under stress.

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## 6. System Failures and Malfunctions

- Software or hardware failures can lead to:
- Overcharging or over-discharging (which can degrade cells or lead to fire),
- Loss of energy delivery capability,
- Unintended shutdowns during critical power demands.

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## 7. Cybersecurity Threats

As BESS facilities are increasingly integrated with smart grids and remote control systems:

- They become potential targets for cyberattacks.
- A successful attack could lead to grid destabilization, forced shutdowns, or even battery damage.

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## 8. Natural Disasters

- Earthquakes, floods, wildfires, or hurricanes can damage infrastructure and increase the risk of hazardous releases or fires.
- Flooding in particular can cause short circuits or expose hazardous materials.

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## 9. Security and Vandalism

- Physical security is crucial to prevent unauthorized access, vandalism, or theft (particularly for expensive materials like lithium, cobalt, or copper).

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## 10. Aging and Degradation

- Batteries degrade over time, increasing the chance of failures, internal shorts, or reduced safety margins.
- Old systems may not meet modern safety standards or may require decommissioning protocols.

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## Mitigation Strategies:

- Advanced fire detection/suppression systems.
- Proper ventilation and thermal management.
- Regular maintenance and system checks.
- Cybersecurity protections.
- Site selection away from population centers or critical infrastructure.
- Emergency response planning and coordination with local authorities.

Reply to customer



**TOWNSHIP OF CHATSWORTH**  
316837 Highway 6, RR 1  
Chatsworth, Ontario N0H 1G0  
Telephone 519-794-3232 – Fax 519-794-4499

August 11, 2025

RECEIVED

By Email Only: [SeniorAdmin@burksfalls.ca](mailto:SeniorAdmin@burksfalls.ca)

AUG 11 2025

Village of Burk's Falls  
172 Ontario Street  
Box 160  
Burk's Falls ON

TOWNSHIP OF ARMOUR

Attention: Camille Barr, Senior Administrative Assistant

**Re: Resolution: Battery Energy Storage Systems (BESS)**

Please be advised at Township of Chatsworth Council held on August 6, 2025 the following resolution was carried:

THAT Township of Chatsworth Council hereby support the resolution from the Village of Burk's Falls regarding Battery Energy Storage Systems; and FURTHER THAT the Village of Burk's Falls be notified of our support.

Should you require additional information please contact the undersigned.

Sincerely,

Tyler Zamostny, AMP, Dipl.M.A.  
Deputy Clerk



The Municipality of the  
**VILLAGE OF BURK'S FALLS**

Moved By: Ashley Brandt

Date: July 15, 2025

Seconded By: Ryan Baptiste

Resolution # 2025- 244

Be it resolved;

**WHEREAS** the Council of the Village of Burk's Falls, together with residents from surrounding municipalities, has expressed strong and united opposition to the proposed installation of a Battery Energy Storage System (BESS) facility, citing significant concerns regarding public safety, environmental risk, land use compatibility, and insufficient local economic benefit; and

**WHEREAS** the perceived risk associated with BESS installations significantly outweighs any demonstrated local advantage, and further, the lack of established, province-wide planning policies has led to avoidable conflict and uncertainty for municipalities and residents alike;

**Now therefore be it resolved that:**

1. The Council of the Village of Burk's Falls respectfully requests that the Province of Ontario immediately suspend the approval and development of all new BESS installations until a comprehensive, science-based study is completed. Such a study should result in the development of robust, province-wide policies and regulations governing the operation, and risk mitigation of BESS facilities.
2. The Province of Ontario be urged to provide clear policy guidance to municipalities and industry stakeholders recommending that BESS installations be permitted only on lands currently zoned for industrial use, recognizing that:
  - a) such lands have been previously evaluated and approved for industrial development; and
  - b) the limited economic return provided by BESS projects does not justify rezoning lands designated for other uses.

3. The Province of Ontario be further requested to disseminate the results of this study and any associated policy or regulatory recommendations to all Ontario municipalities, thereby preventing unnecessary and costly legal challenges, public opposition, and community division related to the siting of future BESS projects.
4. The Council of the Village of Burk's Falls calls upon Solar Bank Corporation to immediately withdraw its application for the proposed BESS facility at Pegg's Mountain, in the interest of fostering constructive community relations and acknowledging that this situation closely parallels the circumstances in Gravenhurst, where similar concerns led to widespread opposition and rejection of a comparable project.
5. That a copy of this resolution be forwarded to members of parliament (MPP's) and all municipalities in the province of Ontario.

Recorded Vote requested by: \_\_\_\_\_

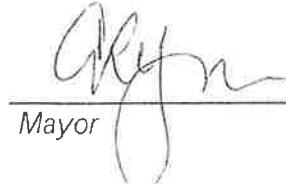
Ryan Baptiste	for / opposed
Ashley Brandt	for / opposed
Sean Cotton	for / opposed
Chris Hope	for / opposed
Nancy Kyte	for / opposed

<u>Y</u>	Carried	Defeated	Deferred
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Pecuniary Interest declared by:

\_\_\_\_\_

\_\_\_\_\_  
Mayor



RECEIVED



AUG 05 2025

TOWNSHIP OF ARMOUR

**Thursday July 31, 2025**

**RE: Support for Village of Burk's Falls – Resolution 2025-244 Opposing BESS Facility Development**

Please be advised that Conmee Township Council passed the following resolution at its regular meeting held July 22, 2025:

**RESOLUTION 2025-156**

**Moved by: Councillor Arnold**

**Seconded by: Councillor Maxwell**

BE IT RESOLVED THAT the Township of Conmee supports the Village of Burk's Falls' Resolution 2025-244, requesting a provincial moratorium on new Battery Energy Storage System (BESS) installations pending a comprehensive, science-based study and the development of province-wide policies and regulations;

AND FURTHER THAT this resolution be forwarded to the Village of Burk's Falls, the Ministry of Energy, the Ministry of Municipal Affairs and Housing, the Federation of Canadian Municipalities (FCM), the Association of Municipalities of Ontario (AMO), and MPP Kevin Holland.

Please find attached the original resolution from the Village of Burk's Falls for reference.

Thank you,  
Karen Paisley  
Municipal Clerk

RECEIVED



AUG 05 2025

TOWNSHIP OF ARMOUR

p. 705-639-5343  
f. 705-639-1880  
info@antownship.ca  
www.antownship.ca

2357 County Road 45  
P.O. Box 29  
Norwood, ON  
K0L 2V0

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August 1, 2025

*Sent by E-mail*

**Premier of Ontario**  
*The Honourable Doug Ford*  
[premier@ontario.ca](mailto:premier@ontario.ca)

**Minister of Municipal Affairs and Housing**  
*The Honourable Rob Flack*  
[minister.mah@ontario.ca](mailto:minister.mah@ontario.ca)

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**Re: Battery Energy Storage Systems**

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Dear Premier and Minister,

At its regular meeting held on July 22, 2025, the Council of the Township of Asphodel-Norwood passed a resolution expressing its support for the Municipality of the Village of Burk's Falls. The resolution includes the following key points:

**WHEREAS** the Council of the Village of Burk's Falls, together with residents from surrounding municipalities, has expressed strong and united opposition to the proposed installation of a Battery Energy Storage System (BESS) facility, citing significant concerns regarding public safety, environmental risk, land use compatibility, and insufficient local economic benefit; and

**WHEREAS** the perceived risk associated with BESS installations significantly outweighs any demonstrated local advantage, and further, the lack of established, province-wide planning policies has led to avoidable conflict and uncertainty for municipalities and residents alike;

**NOW THEREFORE BE IT RESOLVED THAT:**

1. The Council of the Village of Burk's Falls respectfully requests that the Province of Ontario immediately suspend the approval and development of all new BESS installations until a comprehensive, science-based study is completed. Such a study should result in the development of robust, province-wide policies and regulations governing the operation, and risk mitigation of BESS facilities.
2. The Province of Ontario be urged to provide clear policy guidance to municipalities and industry stakeholders recommending that BESS installations be permitted only on lands currently zoned for industrial use, recognizing that:

-2-

- A) such lands have been previously evaluated and approved for industrial development; and
- B) the limited economic return provided by BESS projects does not justify rezoning lands designated for other uses.

3. The Province of Ontario be further requested to disseminate the results of this study and any associated policy or regulatory recommendations to all Ontario municipalities, thereby preventing unnecessary and costly legal challenges, public opposition, and community division related to the siting of future BESS projects.
4. The Council of the Village of Burk's Falls calls upon Solar Bank Corporation to immediately withdraw its application for the proposed BESS facility at Pegg's Mountain, in the interest of fostering constructive community relations and acknowledging that this situation closely parallels the circumstances in Gravenhurst, where similar concerns led to widespread opposition and rejection of a comparable project.
5. That a copy of this resolution be forwarded to members of parliament (MPP's) and all municipalities in the province of Ontario.

Trusting Council's support will be beneficial in advancing this request.

Sincerely,



Melanie Hudson, Clerk  
Township of Asphodel-Norwood



The Municipality of the  
**VILLAGE OF BURK'S FALLS**

172 Ontario Street • PO Box 160 • Burk's Falls ON P0A 1C0  
P 705-382-3138 • F 705-382-2273 • [www.burksfalls.net](http://www.burksfalls.net)

July 16, 2025

Premier's Office  
Room 281  
Legislative Building, Queen's Park  
Toronto, Ontario  
M7A 1A1

Dear Premier Ford,

Subject: BESS Installations in the Township of Armour Project # 903

Please be advised that the Village of Burk's Falls Council passed the following resolution at their July 15, Regular Council Meeting, formally expressing their concerns regarding the BESS Installation on Pegg's Mountain Road in the Township of Armour, project # 903

2025-244

Moved by: Ashley Brandt  
Seconded by: Ryan Baptiste  
Result: Carried

**WHEREAS** the Council of the Village of Burk's Falls, together with residents from surrounding municipalities, has expressed strong and united opposition to the proposed installation of a Battery Energy Storage System (BESS) facility, citing significant concerns regarding public safety, environmental risk, land use compatibility, and insufficient local economic benefit; and

**WHEREAS** the perceived risk associated with BESS installations significantly outweighs any demonstrated local advantage, and further, the lack of established, province-wide planning policies has led to avoidable conflict and uncertainty for municipalities and residents alike;

**Now therefore be it resolved that:**

1. The Council of the Village of Burk's Falls respectfully requests that the Province of Ontario immediately suspend the approval and development of all new BESS installations until a comprehensive, science-based study is completed. Such a study should result in the development of robust, province-wide policies and regulations governing the operation, and risk mitigation of BESS facilities.



The Municipality of the  
**VILLAGE OF BURK'S FALLS**

172 Ontario Street • PO Box 160 • Burk's Falls ON P0A 1C0  
P 705-382-3138 • F 705-382-2273 • [www.burksfalls.net](http://www.burksfalls.net)

2. The Province of Ontario be urged to provide clear policy guidance to municipalities and industry stakeholders recommending that BESS installations be permitted only on lands currently zoned for industrial use, recognizing that:
  - a) such lands have been previously evaluated and approved for industrial development; and
  - b) the limited economic return provided by BESS projects does not justify rezoning lands designated for other uses.
3. The Province of Ontario be further requested to disseminate the results of this study and any associated policy or regulatory recommendations to all Ontario municipalities, thereby preventing unnecessary and costly legal challenges, public opposition, and community division related to the siting of future BESS projects.
4. The Council of the Village of Burk's Falls calls upon Solar Bank Corporation to immediately withdraw its application for the proposed BESS facility at Pegg's Mountain, in the interest of fostering constructive community relations and acknowledging that this situation closely parallels the circumstances in Gravenhurst, where similar concerns led to widespread opposition and rejection of a comparable project.
5. That a copy of this resolution be forwarded to members of parliament (MPP's) and all municipalities in the province of Ontario.

Regards,

**Camille Barr**  
Senior Administrative Assistant

Encl. cc: Minister of Municipal Affairs and Housing, Rob Flack, [rob.flack@pc.ola.org](mailto:rob.flack@pc.ola.org); MP Scott Aitchison, [Scott.Aitchison@parl.gc.ca](mailto:Scott.Aitchison@parl.gc.ca), MPP Graydon Smith [graydon.smith@pc.ola.org](mailto:graydon.smith@pc.ola.org) and all Ontario Municipalities.

# AGENDA

## BESS RESPONSES

1. The location selection is deeply flawed and places immense risk on not just our community but also neighbouring communities.
2. The location is too close to the river, too close to the village especially with prevailing wind, and too close to the highway.
3. The proposal has created an atmosphere of Toxic Anxiety. It is already affecting resident's mental health and the project has not even been approved yet.
4. There are almost no local economic benefits. All is remotely monitored and controlled. Response times by emergency personnel are purely estimates.
5. All bordering municipalities assume huge risks, with potential costs in legal appeals, safety studies and public discussions running up to and possibly beyond the total assessments levied over the lifetime of the installation, making it not even worth the costs of the process.
6. It is impossible to assure safety, and it's impossible to predict the amount of contamination possible. There simply is no concrete long-term data on these installations. Changes in composition of chemicals need time to be studied thoroughly and this has not happened yet.
7. We have asked the Ontario Government to limit new BESS installations to already zoned industrial land; these sites are well suited to mitigate such environmental risks and have been well-studied and assessed.  
Mine sites, mill sites, old de-commissioned dump sites that already qualify for other hazardous materials are ideal for BESS and would lessen the time and expense of assessments, studies and applications. Many of these sites already have trained industrial-level fire suppression teams, hazmat equipment and retention ponds for water required for fighting serious industrial fires.  
Furthermore, many of these industrial operations would clearly benefit from partnerships with BESS installations as they often require supplemental power on demand, can actually re-invest revenue from hosting BESS facilities in their operations, and offer BESS operators large areas to expand, in areas already zoned for industrial use.

# AGENDA

8. Solar Bank alluded that they were discussing further 'incentives' for Armour, which implies that there is a price that Armour Council is willing to settle for in exchange for their approval, which is a deeply disturbing development indeed. No matter what's eventually offered, who is Armour to decide for everyone else on an issue of mutual environmental risk?

## RESOLUTION

Whereas the Council of the Village of Burk's Falls, along with the local citizens from every neighbouring municipality who so vehemently and completely oppose the high risk-little reward resulting from hosting a BESS installation, resolves that:

1. The Province of Ontario halt all new BESS installations until such a comprehensive study can be conducted so that common sense policies surrounding the placement and operation of BESS facilities can be thoroughly understood, and proper comprehensive planning be established.
2. That the Province of Ontario provide guidance to Municipalities and the BESS industry that encourage only the use of already zoned industrial land as the facilities a) such zoned land is already approved for industrial use, and b) a BESS installation does not provide enough economic benefit to warrant changes in land zoning.
3. That the Province of Ontario provide this study and guidance to all municipalities so that these expensive and avoidable community fights over the location of BESS installations can be avoided in the future, seeing as every Ontario municipality now runs the risk of having to go through a similar legally expensive and community dividing experience.
4. That Solar Bank Inc, in the interests of good community understanding and partnership, withdraw their application for the proposed Pegg's Mountain site immediately for exactly the reasons cited recently in Gravenhurst as this situation is exactly the same.

JUL 21 2025



The Municipality of the TOWNSHIP OF ARMOUR  
**VILLAGE OF BURK'S FALLS**

Moved By: Ashley Brandt Date: July 15, 2025  
Seconded By: Ryan Baptiste Resolution # 2025-244

Be it resolved;

**WHEREAS** the Council of the Village of Burk's Falls, together with residents from surrounding municipalities, has expressed strong and united opposition to the proposed installation of a Battery Energy Storage System (BESS) facility, citing significant concerns regarding public safety, environmental risk, land use compatibility, and insufficient local economic benefit; and

**WHEREAS** the perceived risk associated with BESS installations significantly outweighs any demonstrated local advantage, and further, the lack of established, province-wide planning policies has led to avoidable conflict and uncertainty for municipalities and residents alike;

**Now therefore be it resolved that:**

1. The Council of the Village of Burk's Falls respectfully requests that the Province of Ontario immediately suspend the approval and development of all new BESS installations until a comprehensive, science-based study is completed. Such a study should result in the development of robust, province-wide policies and regulations governing the operation, and risk mitigation of BESS facilities.
2. The Province of Ontario be urged to provide clear policy guidance to municipalities and industry stakeholders recommending that BESS installations be permitted only on lands currently zoned for industrial use, recognizing that:
  - a) such lands have been previously evaluated and approved for industrial development; and
  - b) the limited economic return provided by BESS projects does not justify rezoning lands designated for other uses.

3. The Province of Ontario be further requested to disseminate the results of this study and any associated policy or regulatory recommendations to all Ontario municipalities, thereby preventing unnecessary and costly legal challenges, public opposition, and community division related to the siting of future BESS projects.
4. The Council of the Village of Burk's Falls calls upon Solar Bank Corporation to immediately withdraw its application for the proposed BESS facility at Pegg's Mountain, in the interest of fostering constructive community relations and acknowledging that this situation closely parallels the circumstances in Gravenhurst, where similar concerns led to widespread opposition and rejection of a comparable project.
5. That a copy of this resolution be forwarded to members of parliament (MPP's) and all municipalities in the province of Ontario.

Recorded Vote requested by: \_\_\_\_\_

Ryan Baptiste	for / opposed
Ashley Brandt	for / opposed
Sean Cotton	for / opposed
Chris Hope	for / opposed
Nancy Kyte	for / opposed

*Y*  
Carried

Defeated

Deferred

Pecuniary Interest declared by:

\_\_\_\_\_  
\_\_\_\_\_

*Griffen*  
Mayor



# Burk's Falls & District Fire Department

Fire Chief  
162 Huston Street  
P.O Box 70  
Burk's Falls  
Ontario, P0A 1C0

RECEIVED

MAY 06 2025

TOWNSHIP OF ARMOUR

Joe Readman  
To Contact Fire Chief  
Call or Email  
Phone: 705-783-3571  
fire@ryersontownship.ca

## *"Fighting Fires...Through Education!"*

After a thorough review of all submitted documents, reports and plans, The Burk's Falls and District Fire Department has the following comments and concerns.

### **Fire and Explosion risks**

Although SolarBank has stated that fires and explosions are unlikely to occur, Evlo; the manufacturer states on their website

*"However, while we consider our lithium iron phosphate (LFP) battery chemistry to be safer than others, no battery is perfect and thermal runaway can, in rare cases, result in fires or explosions. This makes safety precautions paramount when designing battery energy storage systems (BESS). Certification bodies such as UL and NFPA are also raising battery safety standards for the benefit of the industry." - Appendix A*

With Lithium iron phosphate Batteries being the newer version of BESS available, there is very limited information in the fire service today of both historic events involving these units and provided education from the Office of the Fire Marshal. Although many mistake Lithium-ion batteries and Lithium iron phosphate, we needed to separate the two to evaluate this installation.

There is conflicting tactic in the fire service, most agree with a defensive tactic, only protecting exposures. While others side with a direct attack. SolarBanks experts expressed the need to go defensive only tactic which I agreed with. Until the products SDS was provided -Appendix B. In the SDS the Fire-Fighting Measures recommended in this document are:

#### *Suitable Extinguishing Media:*

*Small fires – Dry chemical powder or foam extinguishing agents, carbon dioxide, water spray. Use extinguishing media adapted to the immediate environment.*

*Large fires – Water spray, fog or regular foam. Move containers from fire area if you can do it without risk. Unsuitable Extinguishing Media Do not use small quantities of water. If water spray is used, it must be applied continuously until the fire is extinguished.*

*Specific hazards arising from the hazardous product: The contact of water or water vapor and exposed lithium hexafluorophosphate (LiPF6) may result in the generation of hydrogen and hydrogen fluoride (HF) gas. Fire will produce irritating, corrosive and/or toxic gases. Fumes may cause dizziness or suffocation.*

*Special Protective Equipment and Precautions for Fire-Fighters: Wear self-contained breathing apparatus (SCBA) and protective clothing.*

At anytime during the life of this BESS we may have to commit most, if not all of our resources at this one site for a possible multiday event. This directly contradicts the proposed training and Solarbanks expert's opinion. I don't believe this is done intentionally, more that this is such new technology and is truly evolving by the day. But as the Fire Chief I must rely on the manufacture's direct information. After reviewing these documents, I believe as a Fire Department we must now prepare for the worst case scenario, a multiday large-scale event requiring the need of our Automatic Aid Partners and possibly Mutual Aid Partners.



# Burk's Falls & District Fire Department

Fire Chief  
162 Huston Street  
P.O Box 70  
Burk's Falls  
Ontario, P0A 1C0

Joe Readman  
To Contact Fire Chief  
Call or Email  
Phone: 705-783-3571  
[fire@ryersontownship.ca](mailto:fire@ryersontownship.ca)

**"Fighting Fires...Through Education!"**

With the current push in the fire service, with the support of the Provincial Government there are an abundance of unknowns when it comes to firefighter cancers. I can not find documentation, but this is a concern I do have for our members and the members of any other station coming to assist, what are the long term negative effects during a fire event to firefighter's health.

With this installation being in the MNRF high risk area I'd like to point out to Council that in our MNRF agreement we are responsible for any fires that start in this area. This means if a large forest fire was to occur and we needed to call in the MNRF for assistance, the additional costs would fall back on the township.

## **Environmental Concerns**

It has happened in the past, during large fire events the MOE receives complaints and contacts the fire department requesting the location of the water runoff, and what steps are being done to control that runoff from contaminating the surrounding areas.

I have asked for a water catch system or a storm water system to be installed and this has been met with data suggesting it's not required, however Appendix B states the following:

*Lithium battery electrolyte must not be dumped in drains, on the ground or in any other waters. Store material for disposal as indicated in section 7 Handling and storage.* -Appendix B

During a fire event these Electrolytes may be released and carried in any runoff water.

## **Training**

Solarbank has offered training which involves online training prior to any components arriving, onsite training before operation goes online and any future training needed. This would be taught by their third-party expert. My concerns are that the expert's opinions and tactics now do not line up with the SDS provided. Appendix B.

## **Financial impacts**

Possible financial impacts that the township could face would be:

-Additional insurance cost, Ryerson township has already inquired to the insurance provider for the fire department and have been told, yes, our rates will go up if this is installed in our coverage area.

This may be the same for our automatic aid partners. Working with neighbouring departments, we have already received notice from one department that they may look for cost recovery for such an event.



# Burk's Falls & District Fire Department

Fire Chief  
162 Huston Street  
P.O Box 70  
Burk's Falls  
Ontario, P0A 1C0

Joe Readman  
To Contact Fire Chief  
Call or Email  
Phone: 705-783-3571  
fire@ryersontownship.ca

***"Fighting Fires...Through Education!"***

## Conclusion

With the technology changing by the day, we must look at the most reliable information and in my opinion that would be the source information from Evlo the manufacturer. With that, if the township does move ahead my requests would be as follows:

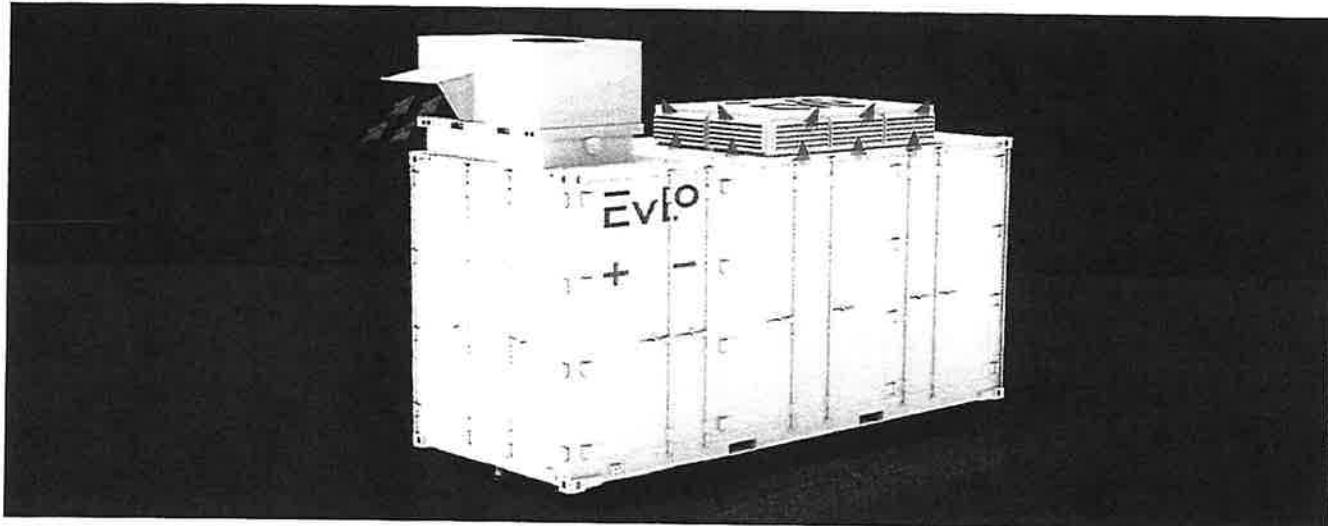
- 1) Installation of a Dry Hydrant to ensure access to unlimited amounts of water, as per SDS
- 2) A storm water system be designed and installed to catch all water run off from the site in the event of a fire, as per SDS to eliminate the township taking on this risk.
- 3) A new training program be designed based on the information given from Evlo focusing on:
  - a. Firefighting tactics- as per SDS
  - b. Air monitoring- as per hazards identified in the SDS
  - c. More defined evacuation areas based on the SDS
  - d. Specific training on the known contaminants and proper decontamination for water reactive products in the BESS system
- 4) A thorough review of the possible negative effects this installation could have during a fire event of the location of the new Fire Hall/Emergency Operations Centre and proposed medical centre.
- 5) I would like Councils permission to renegotiate our MNRF agreement at our next opportunity (next February) asking them to cover this area of response. This will be an increase financially on the township on their yearly fee to MNRF but will prevent a large payment if we needed to call in the MNRF resources during a forest fire caused by the BESS unit.
- 6) That Council formally notifies each Automatic Aid Partner that our insurance rates will be increased and that each of them should investigate. The Township of Armour should then be prepared to cover those potential cost increases as they are taking on the cost to assist us.

## Appendix A

## BLOG

# Ensuring Fire Safety in BESS

May 9, 2023



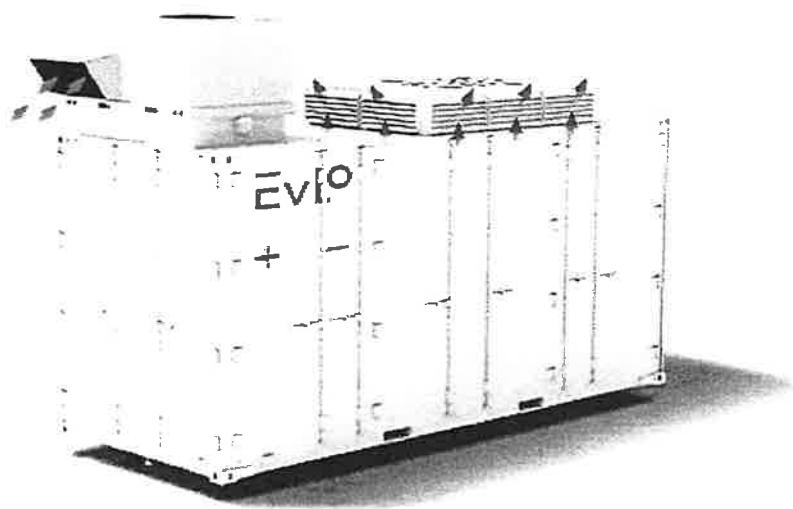
## Leading-edge fire protection solutions at all levels

### Evolving EVLO security technologies

As renewable energy sources like wind and solar continue to grow, utility-scale energy storage systems are essential to ensure that homes, communities, and businesses can rely on a dependable supply of clean electricity. Lithium batteries' high energy density and long lifecycle make them a common choice for utilities to back up these renewable resources.

However, while we consider our lithium iron phosphate (LFP) battery chemistry to be safer than others, no battery is perfect and thermal runaway can, in rare cases, result in fires or explosions. This makes safety precautions paramount when designing battery energy

As a subsidiary of Hydro-Québec, EVLO's engineers are keenly aware of utilities' needs regarding safety in BESS. We've developed a unique system of technical safety features at every level of our battery system: module, rack, and enclosure. From fire detection to thermal runaway prevention, our safety mechanisms both limit the risk of thermal runaway and, in case of an event, ensure that thermal propagation will be kept to a minimum and the event remains self-contained.



## Utility-Grade Safety, by Utility Professionals

EVLO's BESS are designed by engineers who are experienced with meeting utility-scale demands. Our engineers not only perform multiple simulations to create accurate models of gas emissions during thermal runaway, but also field test these designs as well. Since battery fire behavior varies extensively, they use these models to design mitigating measures for a wide variety of scenarios.

Working in collaboration with numerous globally respected and independent safety firms, we also conduct comprehensive and thorough analyses to provide further validation and confidence in our quest to build the safest BESS.

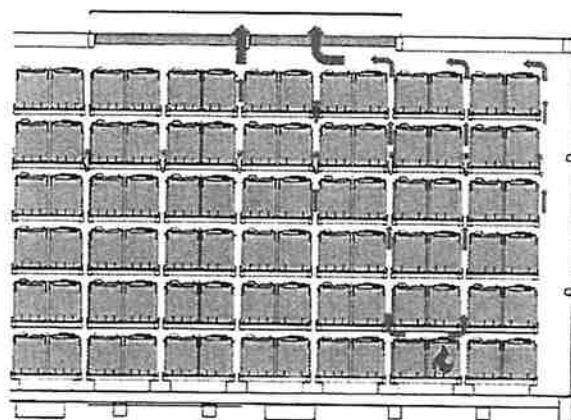
### ↳ Mitigation Measures at Each Level

At the module level, thermal barriers are installed between the cells to slow down and prevent propagation to neighboring cells.

Each tray contains up to six modules. At the module level, thermal barriers are installed between cells to slow down and prevent propagation to neighboring cells.

The tray level includes two forms of fire protection: double thermal barriers between each tray, and the arrangement of the trays themselves. The design creates an air gap between each tray. In case of thermal runaway, this gap functions as a chimney by providing a path for gas release that avoids contact with nearby trays, therefore limiting temperature increase on neighboring modules.

At the enclosure level, there are hundreds of sensors as well as proprietary-designed venting panels. Once these sensors detect excess heat, smoke, or hydrogen, they trigger the active mitigation plan: the HVAC goes into Economizer Mode and forces fresh air in from outside the enclosure. Simultaneously, the venting panels open to release hot gas from the enclosure.



This system works even during power outages, since the venting panels include a failsafe mechanism. In this condition, natural convection alone is enough to meet the performance requirements of NFPA 69.

## Why We Chose a Layered Approach to Fire Safety

The reason we chose to integrate both active and passive safety approaches with our BESS design is simple: to ensure that our BESS are as safe as possible.

describes active approaches such as ours, in which the chimney-like design and vents provide

ventilation for gas release. NFPA 68 details a passive approach that includes deflagration panels on the container.

Deflagration panels are sheets of metal that open and release pressure in case of an explosion. This method requires that the container's design withstand the initial pressure buildup, which ultimately tears the deflagration panel apart and releases the pressure. The process still allows an explosion, which doesn't allow for individual unit testing (because the process would destroy that unit). The resulting destruction makes it impossible to ensure that this method will work as intended for each unit.

These drawbacks led us to base our fire mitigation approach on NFPA 69, which makes use of sensors, can be tested on a unit-by-unit basis, and is designed to prevent explosions. Our approach also goes beyond NFPA 69's requirements because we add passive fire mitigation elements on top of our active strategies. Namely, the failsafe venting panels open by themselves to release pressure even during a power outage. We call this approach NFPA 69++.

Our fire mitigation designs also offer flexibility depending on users' different preferences and requirements. For example, some may need extra sensors, while others may want a different type of detection sensors depending on their climate or requirements. Our engineers can adapt these to meet the most stringent safety standards.

## The Most Thorough BESS Fire Prevention Testing Possible

Like all reputable BESS systems, our EVLO systems are tested using the UL 9540A test procedure – but we go far beyond the minimum requirements to ensure that our batteries are as safe as possible.

The UL 9540A test procedure is a set of tests for each succeeding level: cell, module, unit, and system. Currently, the minimum level lithium-ion batteries must pass is the unit level, so many lithium batteries are only tested up to that level. However, this level does not provide a full engineering validation because it doesn't test all the safety features that must be implemented to meet the requirements of NFPA 855 68 and 69 sections.

cell, the module, the unit, the enclosure, detection hardware, mitigation hardware, and software. That's why we have developed our own Engineering Validation Plan consisting of a large scale fire test on a fully functional enclosure following UL 9540A system-level guidelines. This test validates the performance as well as active, passive and gas ignition modes.

So for us, UL 9540A testing is just one part of the complete Engineering Validation Plan that we provide for our products. Testing the entire system in real-life conditions ensures that our fire mitigation measures will perform reliably on our customer's sites under any circumstances.

## Keeping Firefighters Safe with Distant Fire Resolution

In most cases, our mitigation strategies end thermal runaway by evacuating gasses via the opened venting panels. The fire resolves itself without any need for extinguishing agents such as water, and operators can then replace the module and fuse to regain a functional system.

With this solution, firefighters aren't usually needed onsite as the fire is fully contained.

However, to provide maximum flexibility in safety measures, we also offer an optional dry pipe system inside the container. These pipes allow firefighters to connect to the Fire Department Connection (FDC) located away from the enclosure. Once the water's connected, it spreads sufficiently throughout the enclosure without flooding it. This limits the temperature rise and prevents the fire from spreading to nearby enclosures. If customers desire additional measures, the dry pipe option provides an extra layer of safety by enabling first responders to deal with out-of-control fires while keeping a safe distance and maintaining personnel safety.

## BESS Systems That Put Safety First

From product design through testing and performance, we've worked to make EVLO's BESS solutions the safest possible. Designed by engineers with extensive experience in utility environment and module design, they incorporate tailored fire mitigation measures from the module through the enclosure level. In addition to active mitigation measures that surpass NFPA 69 requirements, we've included passive measures that work even during loss

## Appendix B

## EVLOFLEX

**1. Identification**

<b>Product Identifier:</b>	EVLOFLEX
<b>Other Means of Identification:</b>	Lithium Batteries Installed in a Cargo Transport Unit
<b>Recommended Use and Restrictions on Use:</b>	Energy Storage System by batteries
<b>Initial Supplier Identifier:</b>	EVLO Energy Storage Inc. 1804 Boul. Lionel-Boulet Varennes, QC, Canada, J3X 1S1 + 1-450-400-1414 <a href="mailto:info@evloenergie.com">info@evloenergie.com</a> <a href="https://evloenergy.com/">https://evloenergy.com/</a>
<b>Emergency Telephone Number (Hours of Operation):</b>	+ 1-514-289-2211 (Monday to Friday, 8:30 a.m. to 4:30 p.m.)

**2. Hazard Identification**

<b>Classification of the Product</b>	This product is exempt from hazard classification according to the Hazardous Products Act. This product is not subject to the Workplace Hazardous Materials Information System (WHMIS) and the Globally Harmonized System (GHS) classification.
<b>GHS Information Elements :</b>	
Hazard Pictogram(s) :	Not Applicable
Signal Word :	Not Applicable
Hazard Statements :	Not Applicable
<b>Precautionary Statement :</b>	
Prevention :	Not Applicable
Response :	Not Applicable
Storage :	Not Applicable
Disposal :	Not Applicable
<b>Other known Hazards :</b>	This product is safe under normal use. Exposure to the ingredients of the lithium batteries it contains, or to their combustion products, may be hazardous. The risk of exposure only occurs if the lithium batteries inside the storage system have been damaged mechanically, thermally or electrically, and the battery casing breaks.

**3. Composition/Information on Ingredients**

<b>Substance or Mixture :</b>	Mixture
-------------------------------	---------

<b>Chemical Name :</b>	Not Applicable
<b>Common Name and Synonyms</b>	Energy Storage System by batteries, Lithium Batteries Installed in a Cargo Transport Unit, EVLOFLEX,
<b>Formula</b>	Not Applicable

Component	CAS Number	Concentration (% weight)
Lithium Battery		
Lithium iron phosphate	156-21-8	40.3
Graphite	7782-42-5	21.5
Copper	7440-50-8	9.86
Ethyl methyl carbonate	623-53-0	9.6
Ethylene carbonate	96-49-1	6.3
Aluminium	7429-90-5	4.68
Lithium hexafluorophosphate	21324-40-3	2.9
Polypropylene	9003-07-0	2.14
Dimethyl carbonate	616-38-6	1.5
Aluminium/Polypropylene film	Not applicable	1.22

## 4. First Aid Measures

### Description of Necessary First Aid Measures:

If contact with the internal contents of an open lithium battery cell:

#### Inhalation :

Move the person to a well-ventilated area and keep them in a position where they can comfortably breathe. If not breathing, give artificial respiration. Consult a doctor.

#### Ingestion :

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call Poison Control Center or a doctor.

#### Skin Contact :

Take off immediately all contaminated clothing. Rinse skin with plenty of water for several minutes. If irritation persist, consult a doctor.

#### Eye Contact :

Rinse eyes with plenty of water. Remove contact lenses if easily possible. Continue to rinse. Neutral saline solution may be used for rinsing if available. If irritation persists, consult a doctor.

#### Most Important Symptoms and Effects:

Direct contact with internal electrolyte gel may cause severe eye damage or blindness, and skin irritation or burns. Vapors or mist may irritate eyes, mucous membranes and respiratory tract. Exposure may cause nausea, dizziness and headaches.

#### Indication of Immediate Medical Attention and Special Treatment Needed:

No further relevant information available.

## 5. Fire-Fighting Measures

### **Suitable Extinguishing Media :**

Small fires – Dry chemical powder or foam extinguishing agents, carbon dioxide, water spray. Use extinguishing media adapted to the immediate environment.

Large fires – Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

### **Unsuitable Extinguishing Media**

Do not use small quantities of water. If water spray is used, it must be applied continuously until the fire is extinguished.

### **Specific hazards arising from the hazardous product:**

The contact of water or water vapor and exposed lithium hexafluorophosphate (LiPF6) may result in the generation of hydrogen and hydrogen fluoride (HF) gas. Fire will produce irritating, corrosive and/or toxic gases. Fumes may cause dizziness or suffocation.

### **Special Protective Equipment and Precautions for Fire-Fighters:**

Wear self-contained breathing apparatus (SCBA) and protective clothing.

## 6. Accidental Release Measures

### **Personal Precautions, Protective Equipment and Emergency Procedures**

The material contained in the batteries is only released if the battery is mechanically, thermally or electrically damaged, and the battery casing breaks.

#### **For Non-Emergency Personnel:**

Avoid contact with the product. Avoid inhalation of vapours. Evacuate hazardous area and follow emergency procedures.

#### **For Emergency Responders:**

Protective clothing, gloves, safety glasses and wear an approved self-contained breathing apparatus. Ensure adequate ventilation. Remove all sources of ignition.

#### **Environmental Precautions:**

Do not allow electrolyte to enter sewers or soil. Do not let product enter drains.

#### **Methods and Materials for Containment and Cleaning up:**

Cover drains. Avoid an additional spill or leak, if is safe. If the electrolyte leaks, use soil, sand, vermiculite or other non-combustible materials to absorb it. Leaking batteries and dirty adsorbents should be placed in metal containers. Dispose of materials in accordance with local, provincial or federal regulations.

## 7. Handling and Storage

### **Precautions for Safe Handling:**

#### **Handling Advice**

Operators should be trained and strictly abide by operating procedures. Do not open, disassemble, crush, perforate or burn the cells. Do not expose cell to temperatures outside the range -40°C to 80°C. Keep away from ignition sources, flame and sparks. Work in a well-ventilated area.

**Hygiene Measures**

Wear adequate protective clothing and safety glasses. Remove metal accessories, rings and other jewelry when handling powered batteries.

**Conditions for Safe Storage, Including and Incompatibilities:**

Store cell in a dry and well-ventilated place with minimal temperature change. It is recommended that the cells be kept at room temperature (25°C +/- 5°C). Keep away from ignition sources, heat and flame. Do not store near to strong oxidizing, combustible materials and corrosives. Keep out of reach of children.

## 8. Exposure Controls / Personal Protection

**Control Parameter :**

Airborne exposures to hazardous substances are not expected when product is used for its intended purpose. The following values are for substances in the lithium batteries which have exposure values.

Components	Value	Control Parameters	Basis
Graphite	TWAEV	2 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	TWA	2.5 mg/m <sup>3</sup>	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
	TWA	2.5 mg/m <sup>3</sup>	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
Cooper	TWAEV	Dust : 1 mg/m <sup>3</sup> Smoke : 0.2 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
	TWA	Dust : 1 mg/m <sup>3</sup> Smoke : 0.1 mg/m <sup>3</sup>	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
	TWA	Dust : 1 mg/m <sup>3</sup> Smoke : 0.1 mg/m <sup>3</sup>	California permissible exposure limits for chemical contaminants (Title 8, Article 107)

**Appropriate Engineering Controls :**

Handle in accordance with good industrial hygiene practices and safety procedures. Use local exhaust ventilation or other engineering controls to control sources of dust, mist, fume and vapor.

**Individual Protection Measures :****Eyes**

Not necessary under normal conditions. In the event of battery breakage or leakage, wear safety glasses when handling batteries.

**Skin**

Not necessary under normal conditions. In the event of battery breakage or leakage, wear neoprene or natural rubber gloves. Change disposable gloves within 30 minutes of obvious electrolyte contamination. Remove dirty gloves using proper technique. Do not touch the outer surface of the glove. Safety boots are recommended.

**Inhalation**

Not necessary under normal conditions. In the event of battery breakage or leakage, use a self-contained

breathing apparatus (SCBA) or a mask with positive pressure air supply approved by NIOSH or equivalent.

**Other**

Do not eat, drink or smoke in work area. Wash hands before breaks and at the end of the working day.



## 9. Physical and Chemical Properties

<b>Physical state:</b>	Solid
<b>Particle characteristics</b>	Cell
<b>Colour:</b>	Not Applicable
<b>Odour:</b>	Odorless
<b>pH:</b>	Not Applicable
<b>Melting point:</b>	Not Applicable
<b>Freezing point:</b>	Not Applicable
<b>Boiling point:</b>	Not Applicable
<b>Flash point</b>	Not Applicable
<b>Flammability:</b>	Contains flammable materials
<b>Upper and lower flammability or explosive limits:</b>	Not Applicable
<b>Vapour pressure:</b>	Not Applicable
<b>Vapour density:</b>	Not Applicable
<b>Relative density:</b>	Not Applicable
<b>Solubility:</b>	Insoluble
<b>Partition coefficient -n-octanol/water:</b>	Not Applicable
<b>Auto-ignition temperature:</b>	Not Applicable
<b>Decomposition temperature:</b>	90°C
<b>Viscosity:</b>	Not Applicable

## 10. Stability and Reactivity

**Reactivity :**

Considered non-reactive under normal conditions of use at ambient temperature.

**Chemical Stability :**

Sealed and normally functioning power cells are considered stable.

**Possibility of Hazardous Reaction :**

In the event of leakage, a violent reaction may occur when in contact with hot and concentrated acid, strong oxidizers and water.

**Conditions to Avoid :**

Avoid exposing the cell to fire or temperatures above 80°C. Do not disassemble, crush, short or install with

incorrect polarity. Avoid mechanical or electrical abuse.

**Incompatibles Materials :**

Strong bases, combustible materials, reducing agents, strong oxidizing agents, corrosive materials, water or other conductive liquids.

**Hazardous Decomposition Products:**

This material may release toxic fumes if burned or exposed to fire. Breaching of the cell may lead to generation of hazardous fumes which may include extremely hazardous hydrofluoric acid.

## **11. Toxicological Information**

**Likely Routes of Exposure :****Inhalation**

None under normal conditions of use. Inhalation may occur if vapors are generated by heat or if cell integrity is compromised. Inhalation of vapours may cause irritation of the upper respiratory tract and lungs.

**Ingestion**

None under normal conditions of use. Ingestion may occur only if cell integrity is compromised. Ingestion may cause severe chemical burns of the mouth, esophagus and digestive tract.

**Skin Contact**

Non-irritating to skin under normal conditions of use. Battery electrolyte may cause skin irritation.

**Eyes Contact**

Non-irritating to skin under normal conditions of use. Battery electrolyte may cause skin irritation. Battery electrolyte may cause eye irritation. Battery electrolyte may cause eye irritation.

**Symptoms Related to the Physical, Chemical and Toxicological Characteristics**

Not Available

**Delayed and immediate effects, and chronic effects from short term and long-term exposure**

Normal safe handling of this product will not result in exposure to substances that are considered human carcinogens.

**Numerical Measures of Toxicity :**

Not Available

## **12. Ecological Information**

**Ecotoxicity :**

Aquatic Toxicity :: Not Available

Terrestrial Toxicity : Not Available

**Persistence and Degradability:** Not readily biodegradable

**Bioaccumulative Potential :** Not Available

**Mobility in Soil:** Not Available

**Other Adverse Effects:** Batteries and cells released into the environment degrade slowly and may release toxic or harmful substances toxic or harmful substances. Batteries must be disposed of or recycled in accordance with local regulations.

## 13. Disposal Considerations

### Disposal Methods :

Recycling of batteries, cells and energy storage system components is encouraged. Recycle and dispose of waste materials at an approved waste management facility, in accordance with local, state or provincial and federal laws and regulations. Do not dispose of a used battery or cell, or any part of the energy storage system, in the dump. Lithium battery electrolyte must not be dumped in drains, on the ground or in any other waters. Store material for disposal as indicated in section 7 Handling and storage.

**Canada:** Dispose of in accordance with local, state and federal laws and regulations. Consult the Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations.

**USA:** Dispose of in accordance with local, state and federal laws and regulations. See Universal/Hazardous Waste Regulations for information on disposal of used batteries. In the event of battery leakage or opening, consult hazardous waste regulations under the U.S. Environmental Protection Agency's Resource Conservation and Recovery Act (RCRA).

**EU:** Waste must be disposed of in accordance with relevant EC Directives and national, regional and local environmental control regulations. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

## 14. Transport Information

	TDG	DOT	ADR	IMDG	IATA
UN Number	UN3536	UN3536	UN3536	UN3536	UN3536
Proper Shipping Name	Lithium batteries installed in cargo transport unit				
Class					9
Packing Group	Not applicable				
Marine Pollutant	No	No	No	No	No
Additional information	UN3536 – TDGR article 2.2 (4)	Special provision: 389	Special provision: 389	S. P.: 389 EMS: F-A, S-I; Category A	Forbidden

**Special handling instructions :** Use crane that can handle safely 65,000 lbs (estimated). Use four points at each corner on top of the container. Forklift of 65,000 lbs capacity can also be used.

**TDG** UN3536 is not included in the RTMD, but a consignor may use the appropriate

## DOT

classification in the ICAO Technical Instructions, the IMDG Code or the UN Recommendations to transport dangerous goods within Canada by a road vehicle, a railway vehicle or a vessel on a domestic voyage if these Regulations or the document from which the classification is taken does not forbid their transport. TDGR Article 2.2(4) This entry only applies to lithium ion batteries installed in a cargo transport unit and designed only to provide power external to the cargo transport unit. Hazardous materials necessary for the safe and proper operation of the cargo transport unit (e.g., fire extinguishing systems and air conditioning systems), must be properly secured to or installed in the cargo transport unit and are not otherwise subject to this subchapter.

## ADR

This entry applies to lithium-ion batteries installed in cargo transport unit and designed only to provide power external to the cargo transport unit. Dangerous goods necessary for safe and proper operation of the cargo transport unit (e.g. fire extinguishing systems and air-conditioning systems) shall be properly secured to or installed in the cargo transport unit, and are not otherwise subject to ADR

## IMDG

This entry applies to lithium-ion batteries installed in cargo transport unit and designed only to provide power external to the cargo transport unit. Dangerous goods necessary for safe and proper operation of the cargo transport unit (e.g. fire extinguishing systems and air-conditioning systems) shall be properly secured to or installed in the cargo transport unit, and are not otherwise subject to this Code.

## IATA / ICAO

Typically, this applies to lithium ion batteries installed into multi-modal shipping containers (cargo transport unit) where the completed unit acts as a large storage battery. The completed unit will contain lithium ion batteries plus battery management systems and may include air conditioning and a fire suppression system.

## 15. Regulatory Information

## GHS

This SDS has been completed in accordance with GHS Rev10 (2023)

## TDG

This product has been classified in accordance with IATA, IMDG, ADR and TDGR transport regulations.

## WHIMIS

This product has been classified in accordance with the hazard criteria of the HPR and the safety data sheet contains all the information required by the HPR.

## TSCA

Substances	TSCA Inventory ID#
Lithium Battery	
Lithium iron phosphate	19744
Graphite	15375
Copper	14994
Ethyl methyl carbonate	6088
Ethylene carbonate	1553
Aluminium	14935
Lithium hexafluorophosphate	21960
Diméthyl carbonate	5895

## 16. Other Information

### Glossary :

ADR	Agreement Concerning the International Carriage of Dangerous Goods by Road
DOT	Department of Transport U.S.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
HPR	Hazardous Products Regulations
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
OHSA	Occupational Safety and Health Administration
ICAO	International Civil Aviation organization
ROHS	Regulation respecting occupational health and safety
TDG	Transportation of Dangerous Goods
TDGR	Transportation of Dangerous Goods Regulations
TSCA	Toxic substances control act
TWA	Time-Weighted Average
TWAEV	Time-Weighted Average Exposure Value
WHIMIS	Workplace Hazardous Materials Information System

### References :

CCOHS	<a href="https://www.ccohs.ca/index.html">https://www.ccohs.ca/index.html</a>
CNESST	<a href="https://www.cnesst.gouv.qc.ca/en">https://www.cnesst.gouv.qc.ca/en</a>
HPR	<a href="https://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/">https://laws-lois.justice.gc.ca/eng/regulations/SOR-2015-17/</a>
ROHS	<a href="https://www.legisquebec.gouv.qc.ca/en/document/cr/s-2.1,%20r.%2013">https://www.legisquebec.gouv.qc.ca/en/document/cr/s-2.1,%20r.%2013</a>
TDGR	<a href="https://laws-lois.justice.gc.ca/eng/regulations/SOR-2001-286/">https://laws-lois.justice.gc.ca/eng/regulations/SOR-2001-286/</a>
SGH Rev. 10, 2023	<a href="https://unece.org/transport/dangerous-goods/ghs-rev10-2023">https://unece.org/transport/dangerous-goods/ghs-rev10-2023</a>

### SDS Information

Version :	1
Date :	2023-02-01
By	CFT Canada

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. This document must not be regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

APR 25 2025

TOWNSHIP OF ARMOUR

Mayor Ward and Council Armour Township

Date : April 16, 2025

regarding : Solarbank Corporation/ property owner David Creasor

219 Peggs Mountain Rd.

Concession 6, part lot 3

Towship of Armour

My wife and I have been residents of Armour Township residing on Peggs Mountain Road for many decades. We are seniors living out our golden years so to speak.

The tranquil environment of rolling hills and wetlands filled with a huge variety of wild life is in jeopardy with this application to place toxic lithium battery products in our neighborhood.

It has come to my attention that the generation of power at this location provides electricity to the grid in Sprucedale and not to our local township. Let that village provide the space for this technology.

The public presentation by the company at the Katrine community center was somewhat less than fullfilling to say the least.

No mention was made of the extra liability insurance carried by the land owner and the Quebec company for the high risk of these products.

The toxic polution of our wetlands and watershed is at high risk. These resources are too valuable to put in harm's way.

Our volunteer fire services are trained to assist in dangerous scenarios. However, it is well known that usual firefighting apparatus is not effective with lithium fires. Our men and women need not be put in harm;s way for the monetary reward of a firm in Quebec.

The [property owner should be carrying a higher load insurance due to the high risk. I am not aware if this property is zoned commercial. It seems like farm land to me.

As passive seniors we seek peace and quiet in a tranquil setting. That we enjoy at present. This potential installation has the possibility of a disaster waiting to happen.

My wife and I are opposed to this installation that puts out safety and well being at risk. Your support to deny this application is appreciated.



David Schmeler



Jean Schmeler

**SAY NO TO LITHIUM BATTERY STORAGE IN ARMOUR TOWNSHIP!**

A circular logo with a large 'X' over the word 'LITHIUM'. Below the 'X' is the word 'ARMOUR' and at the bottom is the word 'WAY'.

**1. SIGN THE PETITION IN PERSON OR ONLINE**

- [clerk@armourtownship.ca](mailto:clerk@armourtownship.ca) to express your opinion and ask questions.

Visit [Armour Township's website](#) for information regarding the proposed BESS.

## Charlene Watt (Deputy Clerk)

---

**From:** Linda Timms  
**Sent:** April 24, 2025 10:35 PM  
**To:** Charlene Watt  
**Subject:** Proposed Lithium Battery Energy Storage System

To the attention of;  
Charlene Watt, Clerk  
Township of Armour

My name is Linda Timms and I am writing you in regards to the Lithium Bess being proposed at 219 Peggs Mountain Road.

I believe that it is only a matter of time that there will be more and more systems like this and or similar in the future throughout various communities.

However, I am strongly against the location being proposed. The proposed location is far too close to homes, waterways, valuable land, a major highway and the town of Burks Falls.

I believe that the proposed BESS should be in a location where none of these above mentioned issues will be disturbed or at a possible high risk. More research needs to be done in regards to other locations such as an abandoned or non used quarry.

As a resident of Township of Armour I would like to Thank you for giving me the opportunity to submit my thoughts regarding this important matter.

Linda Timms

Mayor Ward and Council Armour Township  
re: Solarbank Corporation/ Property owner 219 Peggs Mountain Road  
Concession 6, part lot 3. Armour Township

regarding an application to permit a lithium battery storage system on the property.

Be advised that I am opposed to such an installation in our township.

At a recent public meeting the information presented seemed to be hiding some critical facts pertinent to the reality at hand.

Such storage systems are hazardous, toxic, and a danger to the environment.

Fires from these devices are spontaneous. Our fire service do not have the equipment nor the training to fight these inevitable disasters.

The toxic waste from these fires will endanger wildlife and the surrounding wetlands and watershed, ~~All 3 solar farms are situated that waste flow will go directly into our water way's~~

It is my understanding that the energy produced will feed the the grid in Sprucedale and not Armour Township. Let that village have their environment threatened.

At the recent public meeting the issue of liability insurance was silent both for the company and the land owner.

It was obvious to me that this proposal is profit motivated. If things go wrong the land owner quickly goes bankrupt and the company disappears back to Quebec and out township is left hold the old bag.

Should the provincial government push for this installation We should urge the location be moved to Sprucedale as the grid is supplied there and not in Armour Township.

The American experience demonstrated at the Katrine meeting clearly showed these elements to be extremely hazardous. The self declared U.S. expert on fire suppressant suggests that Just let the lithium batteries burn is clearly not a viable strategy for any toxic disaster.

over

ERIN RUMFORD

RECEIVED

APR 23 2025

ATT

TOWNSHIP OF ARMOUR



25

**Village of South River**  
Burk's Falls – BESS Installation

Date: April 8, 2025

Motion Number: 121-2025

Moved By: Judy Brooks

Seconded By: Barry Scott

**BE IT RESOLVED THAT** the Council of the Village of South River does hereby support Burk's Falls Resolution # 2025-91 opposing a Battery Energy Storage System (BESS) development near urban areas and waterways, specifically the site plan proposed by Solar Bank Inc. for a BESS installation at Concession 6, Part Lot 3 on Pegg's Mountain Road and further that this resolution be circulated to all neighbouring municipalities in the Almaguin Highlands, MP Scott Aitchison, MPP Graydon Smith and the Ontario Minister of the Environment Hon. Andrea Khanjin.

Carried By: Jim Spencer

Lost By: \_\_\_\_\_

- 105 -

APR 22 2025

Mayor Ward and Council Armour Township

TOWNSHIP OF ARMOUR

re: Solarbank Corporation/ Property owner 219 Peggs Mountain Road  
Concession 6, part lot 3. Armour Township

regarding an application to permit a lithium battery storage system on the property.

Be advised that I am opposed to such an installation in our township.

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Fires from these devices are spontaneous. Our fire service do not have the equipment nor the training to fight these inevitable disasters.

The toxic waste from these fires will endanger wildlife and the surrounding wetlands and watershed.

It is my understanding that the energy produced will feed the grid in Sprucedale and not Armour Township. Let that village have their environment threatened.

At the recent public meeting the issue of liability insurance was silent both for the company and the land owner.

It was obvious to me that this proposal is profit motivated. If things go wrong the land owner quickly goes bankrupt and the company disappears back to Quebec and our township is left hold the old bag.

Should the provincial government push for this installation We should urge the location be moved to Sprucedale as the grid is supplied there and not in Armour Township.

The American experience demonstrated at the Katrine meeting clearly showed these elements to be extremely hazardous. The self declared U.S. expert on fire suppressant suggests that just let the lithium batteries burn is clearly not a viable strategy for any toxic disaster.

My information from a reliable source advises that we have no equipment in Canada capable to extinguish these fires.

Thank you for the opportunity to express me views. Good luck with you deliberations.

James Shaw

Burks Falls  
P0A 1C0

## **Charlene Watt (Deputy Clerk)**

---

**From:** D Allen ·  
**Sent:** April 20, 2025 10:31 AM  
**To:** Charlene Watt  
**Subject:** ATTENTION: CHARLENE

Hi Charlene,

I have serious concerns over the Lithium Battery Storage Facility being built near Burks Falls. The possible dangers it poses to our environment and to our safety makes me question how this idea ever became something that could actually be considered. I strongly oppose the construction of this facility.

Sincerely,  
Debi Allen

Catrine, Ontario. P0A 1L0

## **Charlene Watt (Deputy Clerk)**

---

**From:** Cassandra Balesdent  
**Sent:** April 18, 2025 1:46 PM  
**To:** Charlene Watt; admin@ryersontownship.ca; info@southriver.ca; admin@mcmurrichmonteith.com; admin@mckellar.ca; Scott.Aitchison@parl.gc.ca  
**Subject:** Proposed BESS facility in Armour

Dear whom it may concern,

I believe that the risk of this proposed facility in Armour Township far outweighs the benefits of having this facility in our pristine country that neighbours Algonquin Park. This facility is to be placed right beside the Magnetawan river which is the main water source for the town of Burk's Falls and runs right into Algonquin Park which has many protected species including a diverse range of flora and fauna. Some of these species include the at risk bald eagle, eastern wolf, and the shortjaw cisco. If this facility were to malfunction which can happen as they are more prone to catastrophic explosions because when they fail they off-gas more hydrogen and create an explosive atmosphere more quickly. These batteries produce extremely toxic and flammable gases when they have a thermal runaway. These gases include Hydrogen Fluoride (which is harmful to all life if inhaled in large amounts can cause death), Carbon Monoxide (CO) and other gases. When humidity and water are added to Hydrogen fluoride it dissolves to create a toxic acid called Hydrofluoric acid. If this were to get into the river it would affect all life in the body of water including aquatic life. This chemical also contaminates groundwater and the soil. When Hydrogen Fluoride is exposed to water, steam, iron or steel it creates toxic and corrosive gases. On top of the risks that come along with the BESS facility being placed here there is the call to question the viability of this company Solarbank Corporation which has only been in operation since 2022. Before this they were known as Abundant Solar Energy Inc which was started in 2013 and before that they were 2389017 Ontario Inc. I believe that these facilities have not been around long enough and/or tested enough to be putting this facility in a place with such beauty and nature that would be greatly affected by this. We need to protect those that do not have a voice and the ones that will suffer the most from this plant which would be the beautiful plants and animals that call Armour their home.

Sincerely a concerned citizen of Burks Falls,

Cassandra Balesdent

<https://nj.gov/health/eoh/rtkweb/documents/fs/3759.pdf>

Common Name: **HYDROGEN FLUORIDE**

Synonyms: Fluoric Acid; HFA

Chemical Name: Hydrofluoric Acid

Date: April 2009      Revision: February 2017

CAS Number: 7664-39-3

RTK Substance Number: 3759

DOT Number: UN 1052

**Description and Use**

**Hydrogen Fluoride** is a colorless, fuming liquid or gas with a strong, irritating odor. It is used in etching glass and in making other chemicals, including gasoline. It is also used as a catalyst and in fluorinating water.

► **ODOR THRESHOLD = 0.04 ppm**

► Odor thresholds vary greatly. Do not rely on odor alone to determine potentially hazardous exposures.

**Reasons for Citation**

► **Hydrogen Fluoride** is on the Right to Know Hazardous Substance List because it is cited by OSHA, ACGIH, DOT, NIOSH, DEP, IARC, NFPA and EPA.  
► This chemical is on the Special Health Hazard Substance List.

SEE GLOSSARY ON PAGE 5.

**FIRST AID**

**Eye Contact**

► Immediately flush with large amounts of water for at least 30 minutes, lifting upper and lower lids. Remove contact lenses, if worn, while flushing. Seek medical attention immediately.

**Skin Contact**

► Immediately flush with large amounts of water. Continue flushing while removing clothing. Apply 2.5% *Calcium Gluconate* gel to the affected skin. Massage the gel into the skin while wearing rubber gloves. Continue to reapply and massage until pain is entirely relieved. Seek medical assistance immediately.

**Inhalation**

► Remove the person from exposure.  
► Begin rescue breathing (using universal precautions) if breathing has stopped and CPR if heart action has stopped.  
► Transfer promptly to a medical facility.  
► Medical observation is recommended for 24 to 48 hours after breathing overexposure, as pulmonary edema may be delayed.

**EMERGENCY NUMBERS**

**Poison Control:** 1-800-222-1222

**CHEMTREC:** 1-800-424-9300

**NJDEP Hotline:** 1-877-927-6337

**National Response Center:** 1-800-424-8802

**EMERGENCY RESPONDERS >>> SEE LAST PAGE**

**Hazard Summary**

Hazard Rating	NJDHSS	NFPA
HEALTH	-	4
FLAMMABILITY	-	0
REACTIVITY	-	1
CORROSIVE	POISONOUS GASES ARE PRODUCED IN FIRE	

Hazard Rating Key: 0=minimal; 1=slight; 2=moderate; 3=serious; 4=severe

► **Hydrogen Fluoride** can affect you when breathed in and may be absorbed through the skin.  
► **Hydrogen Fluoride** is a CORROSIVE CHEMICAL and contact can severely irritate and burn the skin and eyes with possible permanent damage.  
► Contact can irritate the nose and throat.  
► Inhaling **Hydrogen Fluoride** can irritate the lungs. Higher exposures may cause a build-up of fluid in the lungs (pulmonary edema), a medical emergency.  
► Exposure to **Hydrogen Fluoride** can cause headache, dizziness, nausea and vomiting.  
► Very high exposure can cause *Fluoride* poisoning with stomach pain, weakness, convulsions, collapse and death.  
► **Hydrogen Fluoride** may damage the liver and kidneys.  
► Long-term exposure to very high concentrations can cause deposits of *Fluoride* in the bones and teeth, a condition called "Fluorosis."  
► The above health effects do NOT occur at the level of *Fluoride* used in water for preventing cavities in teeth.

**Workplace Exposure Limits**

**OSHA:** The legal airborne permissible exposure limit (PEL) is **3 ppm** averaged over an 8-hour workshift.

**NIOSH:** The recommended airborne exposure limit (REL) is **3 ppm** averaged over a 10-hour workshift and **6 ppm**, not to be exceeded during any 15-minute work period.

**ACGIH:** The threshold limit value (TLV) is **0.5 ppm** averaged over an 8-hour workshift and **2 ppm**, not to be exceeded during any part of the working exposure.

► The above exposure limits are for air levels only. When skin contact also occurs, you may be overexposed, even though air levels are less than the limits listed above.

# HYDROGEN FLUORIDE

## Determining Your Exposure

- ▶ Read the product manufacturer's Material Safety Data Sheet (MSDS) and the label to determine product ingredients and important safety and health information about the product mixture.
- ▶ For each individual hazardous ingredient, read the New Jersey Department of Health Hazardous Substance Fact Sheet, available on the RTK Program website (<http://nj.gov/health/workplacehealthandsafety/right-to-know/>) or in your facility's RTK Central File or Hazard Communication Standard file.
- ▶ You have a right to this information under the New Jersey Worker and Community Right to Know Act, the Public Employees Occupational Safety and Health (PEOSH) Act if you are a public worker in New Jersey, and under the federal Occupational Safety and Health Act (OSHA) if you are a private worker.
- ▶ The New Jersey Right to Know Act and the PEOSH Hazard Communication Standard (N.J.A.C. 12:100-7) requires most employers to label chemicals in the workplace and requires public employers to provide their employees with information concerning chemical hazards and controls. The federal OSHA Hazard Communication Standard (29 CFR 1910.1200) requires private employers to provide similar information and training to their employees.

This Fact Sheet is a summary of available information regarding the health hazards that may result from exposure. Duration of exposure, concentration of the substance and other factors will affect your susceptibility to any of the potential effects described below.

## Health Hazard Information

### Acute Health Effects

The following acute (short-term) health effects may occur immediately or shortly after exposure to **Hydrogen Fluoride**:

- ▶ **Hydrogen Fluoride** can severely irritate and burn the eyes with possible permanent damage.
- ▶ Contact can cause irritation and severe skin and deep tissue burns. The burn may occur hours after contact, even if no pain is felt at the time of the exposure.
- ▶ **Hydrogen Fluoride** can irritate the nose and throat.
- ▶ **Inhaling Hydrogen Fluoride** can irritate the lungs causing coughing and/or shortness of breath. Higher exposures may cause a build-up of fluid in the lungs (pulmonary edema), a medical emergency, with severe shortness of breath.
- ▶ Exposure to **Hydrogen Fluoride** can cause headache, dizziness, nausea and vomiting.
- ▶ Very high exposure can cause *Fluoride* poisoning with stomach pain, weakness, convulsions, collapse and death.

### Chronic Health Effects

The following chronic (long-term) health effects can occur at some time after exposure to **Hydrogen Fluoride** and can last for months or years:

### Cancer Hazard

- ▶ While **Hydrogen Fluoride** has been tested, it is not classifiable as to its potential to cause cancer.

### Reproductive Hazard

- ▶ While **Hydrogen Fluoride** has been tested, further testing is required to assess its potential to cause reproductive harm.

### Other Effects

- ▶ Inhaling **Hydrogen Fluoride** can irritate the lungs. Repeated exposure may cause bronchitis to develop with coughing, phlegm, and/or shortness of breath.
- ▶ **Hydrogen Fluoride** may damage the liver and kidneys.
- ▶ Long term exposure to very high concentrations can cause deposits of *Fluoride* in the bones and teeth, a condition called "*Fluorosis*" (changes in the bone structure). This can cause bone pain, fractures, disability and mottling of the teeth.

## Medical

### Medical Testing

For frequent or potentially high exposure (half the TLV or greater), the following are recommended before beginning work and at regular times after that:

- ▶ Lung function tests

If symptoms develop or overexposure is suspected, the following are recommended:

- ▶ *Fluoride* level in urine. Levels higher than **4 mg/liter** indicate overexposure.
- ▶ Liver and kidney function tests
- ▶ Consider chest x-ray after acute overexposure
- ▶ Bone Density (DEXA) Scan

Any evaluation should include a careful history of past and present symptoms with an exam. Medical tests that look for damage already done are not a substitute for controlling exposure.

Request copies of your medical testing. You have a legal right to this information under the OSHA Access to Employee Exposure and Medical Records Standard (29 CFR 1910.1020).

### Mixed Exposures

- ▶ Smoking can cause heart disease, lung cancer, emphysema, and other respiratory problems. It may worsen respiratory conditions caused by chemical exposure. Even if you have smoked for a long time, stopping now will reduce your risk of developing health problems.
- ▶ More than light alcohol consumption can cause liver damage. Drinking alcohol can increase the liver damage caused by **Hydrogen Fluoride**.

## Workplace Controls and Practices

Very toxic chemicals, or those that are reproductive hazards or sensitizers, require expert advice on control measures if a less toxic chemical cannot be substituted. Control measures include: (1) enclosing chemical processes for severely irritating and corrosive chemicals, (2) using local exhaust ventilation for chemicals that may be harmful with a single exposure, and (3) using general ventilation to control exposures to skin and eye irritants. For further information on workplace controls, consult the NIOSH document on Control Banding at [www.cdc.gov/niosh/topics/ctrlbanding/](http://www.cdc.gov/niosh/topics/ctrlbanding/).

The following work practices are also recommended:

- ▶ Label process containers.
- ▶ Provide employees with hazard information and training.
- ▶ Monitor airborne chemical concentrations.
- ▶ Use engineering controls if concentrations exceed recommended exposure levels.
- ▶ Provide eye wash fountains and emergency showers.
- ▶ Wash or shower if skin comes in contact with a hazardous material.
- ▶ Always wash at the end of the workshift.
- ▶ Change into clean clothing if clothing becomes contaminated.
- ▶ Do not take contaminated clothing home.
- ▶ Get special training to wash contaminated clothing.
- ▶ Do not eat, smoke, or drink in areas where chemicals are being handled, processed or stored.
- ▶ Wash hands carefully before eating, smoking, drinking, applying cosmetics or using the toilet.

In addition, the following may be useful or required:

- ▶ Transfer **Hydrogen Fluoride** from cylinders or other containers to process containers in an enclosed system.

## Personal Protective Equipment

The OSHA Personal Protective Equipment Standard (29 CFR 1910.132) requires employers to determine the appropriate personal protective equipment for each hazard and to train employees on how and when to use protective equipment.

The following recommendations are only guidelines and may not apply to every situation.

### Gloves and Clothing

- ▶ Avoid skin contact with **Hydrogen Fluoride**. Wear personal protective equipment made from material which can not be permeated or degraded by this substance. Safety equipment suppliers and manufacturers can provide recommendations on the most protective glove and clothing material for your operation.
- ▶ Safety equipment manufacturers recommend Barrier® for gloves, and Tychem® Responder® and TK, and Trellchem® HPS, or the equivalent, as protective materials for clothing.
- ▶ All protective clothing (suits, gloves, footwear, headgear) should be clean, available each day, and put on before work.

### Eye Protection

- ▶ Wear non-vented, impact resistant goggles when working with fumes, gases, or vapors.
- ▶ Wear a face shield along with goggles when working with corrosive, highly irritating or toxic substances.
- ▶ Do not wear contact lenses when working with this substance.

### Respiratory Protection

**Improper use of respirators is dangerous.** Respirators should only be used if the employer has implemented a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing, and medical exams, as described in the OSHA Respiratory Protection Standard (29 CFR 1910.134).

- ▶ Where the potential exists for exposure over **0.5 ppm**, use a NIOSH approved full facepiece respirator with an acid gas cartridge which is specifically approved for **Hydrogen Fluoride**. Increased protection is obtained from full facepiece powered-air purifying respirators.
- ▶ Leave the area immediately if (1) while wearing a filter or cartridge respirator you can smell, taste, or otherwise detect **Hydrogen Fluoride**, (2) while wearing particulate filters abnormal resistance to breathing is experienced, or (3) eye irritation occurs while wearing a full facepiece respirator. Check to make sure the respirator-to-face seal is still good. If it is, replace the filter or cartridge. If the seal is no longer good, you may need a new respirator.
- ▶ Consider all potential sources of exposure in your workplace. You may need a combination of filters, prefilters or cartridges to protect against different forms of a chemical (such as vapor and mist) or against a mixture of chemicals.
- ▶ Where the potential exists for exposure over **5 ppm**, use a NIOSH approved supplied-air respirator with a full facepiece operated in a pressure-demand or other positive-pressure mode. For increased protection use in combination with an auxiliary self-contained breathing apparatus operated in a pressure-demand or other positive-pressure mode.
- ▶ Exposure to **30 ppm** is immediately dangerous to life and health. If the possibility of exposure above **30 ppm** exists, use a NIOSH approved self-contained breathing apparatus with a full facepiece operated in a pressure-demand or other positive-pressure mode equipped with an emergency escape air cylinder.

## Fire Hazards

If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA Fire Brigades Standard (29 CFR 1910.156).

- ▶ **Hydrogen Fluoride** is a noncombustible liquid or gas.
- ▶ Extinguish fire using an agent suitable for type of surrounding fire.
- ▶ **POISONOUS GASES ARE PRODUCED IN FIRE**, including **Fluorine**.
- ▶ Use water spray to keep fire exposed containers cool.

## Spills and Emergencies

If employees are required to clean-up spills, they must be properly trained and equipped. The OSHA Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120) may apply.

If **Hydrogen Fluoride** gas or liquid is spilled or leaked, take the following steps:

- ▶ Evacuate personnel and secure and control entrance to the area.
- ▶ Eliminate ignition sources.
- ▶ Ventilate area of leak to disperse the gas.
- ▶ Stop flow of gas. If source of leak is a cylinder and the leak cannot be stopped in place, remove the leaking cylinder to a safe place in the open air, and repair leak or allow cylinder to empty.
- ▶ If a liquid spill, allow to vaporize and disperse, or cover with sodium carbonate or an equal mixture of soda ash and slaked lime. After mixing, add water, if necessary, to form a slurry.
- ▶ Water spray can be used to absorb **Hydrogen Fluoride** vapors escaping from leaking containers of *anhydrous Hydrogen Fluoride*. Use water in flooding quantities.
- ▶ DO NOT wash into sewer.
- ▶ It may be necessary to contain and dispose of **Hydrogen Fluoride** as a HAZARDOUS WASTE. Contact your state Department of Environmental Protection (DEP) or your regional office of the federal Environmental Protection Agency (EPA) for specific recommendations.

## Handling and Storage

Prior to working with **Hydrogen Fluoride** you should be trained on its proper handling and storage.

- ▶ **Hydrogen Fluoride** reacts violently with STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE) and many other compounds.
- ▶ **Hydrogen Fluoride** reacts with WATER and STEAM to produce *toxic* and *corrosive gases*.
- ▶ **Hydrogen Fluoride** reacts with METALS (such as IRON and STEEL) to produce flammable and explosive *Hydrogen gas*.
- ▶ **Hydrogen Fluoride** is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDE, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC); AMINES; METAL SALTS; and SILICON COMPOUNDS.
- ▶ Store in tightly closed containers in a cool, well-ventilated area away from HEAT, SUNLIGHT and COMBUSTIBLES.
- ▶ Carefully purge and/or vent containers which have held **Hydrogen Fluoride** prior to cleaning with WATER.
- ▶ Metal containers of **Hydrogen Fluoride** should be vented regularly to prevent the build-up of *Hydrogen gas*.

## Occupational Health Information Resources

The New Jersey Department of Health, Occupational Health Service, offers multiple services in occupational health. These services include providing informational resources, educational materials, public presentations, and industrial hygiene and medical investigations and evaluations.

### For more information, please contact:

New Jersey Department of Health  
Right to Know Program  
PO Box 368  
Trenton, NJ 08625-0368  
Phone: 609-984-2202  
Fax: 609-984-7407  
E-mail: [rtk@doh.nj.gov](mailto:rtk@doh.nj.gov)  
Web address:  
<http://nj.gov/health/workplacehealthandsafety/right-to-know/>

*The Right to Know Hazardous Substance Fact Sheets are not intended to be copied and sold for commercial purposes.*

## GLOSSARY

**ACGIH** is the American Conference of Governmental Industrial Hygienists. They publish guidelines called Threshold Limit Values (TLVs) for exposure to workplace chemicals.

**Acute Exposure Guideline Levels (AEGLs)** are established by the EPA. They describe the risk to humans resulting from once-in-a lifetime, or rare, exposure to airborne chemicals.

**Boiling point** is the temperature at which a substance can change its physical state from a liquid to a gas.

A **carcinogen** is a substance that causes cancer.

The **CAS number** is unique, identifying number, assigned by the Chemical Abstracts Service, to a specific chemical.

**CFR** is the Code of Federal Regulations, which are the regulations of the United States government.

A **combustible** substance is a solid, liquid or gas that will burn.

A **corrosive** substance is a gas, liquid or solid that causes destruction of human skin or severe corrosion of containers.

**DEP** is the New Jersey Department of Environmental Protection.

**DOT** is the Department of Transportation, the federal agency that regulates the transportation of chemicals.

**EPA** is the Environmental Protection Agency, the federal agency responsible for regulating environmental hazards.

**ERG** is the Emergency Response Guidebook. It is a guide for emergency responders for transportation emergencies involving hazardous substances.

**Emergency Response Planning Guideline (ERPG)** values provide estimates of concentration ranges where one reasonably might anticipate observing adverse effects.

A **fetus** is an unborn human or animal.

A **flammable** substance is a solid, liquid, vapor or gas that will ignite easily and burn rapidly.

The **flash point** is the temperature at which a liquid or solid gives off vapor that can form a flammable mixture with air.

**IARC** is the International Agency for Research on Cancer, a scientific group.

**Ionization Potential** is the amount of energy needed to remove an electron from an atom or molecule. It is measured in electron volts.

**IRIS** is the Integrated Risk Information System database on human health effects that may result from exposure to various chemicals, maintained by federal EPA.

**LEL or Lower Explosive Limit**, is the lowest concentration of a combustible substance (gas or vapor) in the air capable of continuing an explosion.

**mg/m<sup>3</sup>** means milligrams of a chemical in a cubic meter of air. It is a measure of concentration (weight/volume).

A **mutagen** is a substance that causes mutations. A **mutation** is a change in the genetic material in a body cell. Mutations can lead to birth defects, miscarriages, or cancer.

**NFPA** is the National Fire Protection Association. It classifies substances according to their fire and explosion hazard.

**NIOSH** is the National Institute for Occupational Safety and Health. It tests equipment, evaluates and approves respirators, conducts studies of workplace hazards, and proposes standards to OSHA.

**NTP** is the National Toxicology Program which tests chemicals and reviews evidence for cancer.

**OSHA** is the federal Occupational Safety and Health Administration, which adopts and enforces health and safety standards.

**PEOSHA** is the New Jersey Public Employees Occupational Safety and Health Act, which adopts and enforces health and safety standards in public workplaces.

**Permeated** is the movement of chemicals through protective materials.

**ppm** means parts of a substance per million parts of air. It is a measure of concentration by volume in air.

**Protective Action Criteria (PAC)** are values established by the Department of Energy and are based on AEGLs and ERPGs. They are used for emergency planning of chemical release events.

A **reactive** substance is a solid, liquid or gas that releases energy under certain conditions.

**STEL** is a Short Term Exposure Limit which is usually a 15-minute exposure that should not be exceeded at any time during a work day.

A **teratogen** is a substance that causes birth defects by damaging the fetus.

**UEL or Upper Explosive Limit** is the highest concentration in air above which there is too much fuel (gas or vapor) to begin a reaction or explosion.

**Vapor Density** is the ratio of the weight of a given volume of one gas to the weight of another (usually *Hydrogen*), at the same temperature and pressure.

The **vapor pressure** is a force exerted by the vapor in equilibrium with the solid or liquid phase of the same substance. The higher the vapor pressure the higher concentration of the substance in air.

Common Name: HYDROGEN FLUORIDE

Synonyms: Fluoric Acid; HFA

CAS No: 7664-39-3

Molecular Formula: HF

RTK Substance No: 3759

Description: Colorless, fuming liquid or gas

### HAZARD DATA

Hazard Rating	Firefighting	Reactivity
<b>4 - Health</b>	Hydrogen Fluoride is a noncombustible liquid or gas.	Hydrogen Fluoride reacts violently with STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE) and many other compounds.
<b>0 - Fire</b>	Extinguish fire using an agent suitable for type of surrounding fire.	Hydrogen Fluoride reacts with WATER and STEAM to produce toxic and corrosive gases.
<b>1 - Reactivity</b>	POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Fluorine</i> .	Hydrogen Fluoride reacts with METALS (such as IRON and STEEL) to produce flammable and explosive <i>Hydrogen gas</i> .
<b>DOT#:</b> UN 1052	Use water spray to keep fire exposed containers cool.	Hydrogen Fluoride is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDE, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); STRONG ACIDS (such as HYDROCHLORIC, SULFURIC and NITRIC); AMINES; METAL SALTS; and SILICON COMPOUNDS.
<b>ERG Guide #:</b> 125		
<b>Hazard Class:</b> 8 (Corrosive)		

### SPILL/LEAKS

#### Isolation Distance:

Spill: 100 meters (330 feet)

Fire: 1,600 meters (1 mile)

If a gas leak, evacuate area and stop flow of gas. If source of leak is a cylinder and the leak cannot be stopped in place, remove the leaking cylinder to a safe place in the open air, and repair leak or allow cylinder to empty.

If a liquid spill, allow to vaporize and disperse, or cover with sodium carbonate or an equal mixture of soda ash and slaked lime.

Water spray can be used to absorb Hydrogen Fluoride vapors escaping from leaking containers of *anhydrous Hydrogen Fluoride*. Use water in flooding quantities.

### PHYSICAL PROPERTIES

<b>Odor Threshold:</b>	0.04 ppm
<b>Flash Point:</b>	Nonflammable
<b>Vapor Density:</b>	0.7 (air = 1)
<b>Vapor Pressure:</b>	760 mm Hg at 68°F (20°C)
<b>Specific Gravity:</b>	0.99 (water = 1)
<b>Water Solubility:</b>	Miscible
<b>Boiling Point:</b>	67°F (19.4°C)
<b>Freezing Point:</b>	-117.4°F (-83°C)
<b>Ionization Potential:</b>	15.98 eV
<b>Molecular Weight:</b>	20.1

### EXPOSURE LIMITS

**ACGIH:** 0.5 ppm, 8-hr TWA; 2 ppm, Ceiling

**IDLH:** 30 ppm

The Protective Action Criteria values are:

PAC-1 = 1 ppm; PAC-2 = 24 ppm; PAC-3 = 44 ppm

### PROTECTIVE EQUIPMENT

<b>Gloves:</b>	Barrier® (>8-hr breakthrough)
<b>Coveralls:</b>	Tychem® Responder® and TK; and Trellchem HPS (>8-hr breakthrough)
<b>Respirator:</b>	SCBA

### HEALTH EFFECTS

<b>Eyes:</b>	Severe irritation, burns and possible eye damage
<b>Skin:</b>	Irritation and severe burns
<b>Inhalation:</b>	Nose, throat and lung irritation with coughing, and severe shortness of breath (pulmonary edema) Headache, dizziness, weakness, and convulsions

### FIRST AID AND DECONTAMINATION

**Remove** the person from exposure.

**Flush** eyes with large amounts of water for at least 30 minutes. Remove contact lenses if worn. Seek medical attention immediately.

**Immediately** flush skin with large amounts of water. Apply 2.5% *Calcium Gluconate* gel to the affected skin. Seek medical assistance immediately.

**Begin** artificial respiration if breathing has stopped and CPR if necessary.

**Transfer** promptly to a medical facility.

**Medical** observation is recommended as symptoms may be delayed.

## **Charlene Watt (Deputy Clerk)**

---

**From:** John Michels  
**Sent:** April 19, 2025 8:39 AM  
**To:** Charlene Watt (Deputy Clerk)  
**Subject:** Lithium storage

As a home owner in your township and a first responder I feel any movement on this should be voted on. This is a very dangerous situation way to close to natural watercourses and people. Please include my name in any updates in regards to this application. And hopefully due diligence prevails in the office inspecting the application. We live in a fragile beautiful area.

Dan Michels

RECEIVED  
APR 17 2025  
TOWNSHIP OF ARMOUR

John Luck

Subject: Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear  
Scott Aitchison, MP  
Graydon Smith, MPP  
Rod Ward, mayor  
Editor Great North arrow

I am writing to express my strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years.

Notably:

- Moss Landing, California (January 2025): A massive fire at one of the world's largest battery storage facilities led to the evacuation of approximately 1,500 residents due to toxic smoke. The incident highlighted the challenges in managing lithium-ion battery fires, which can emit harmful gases and are difficult to extinguish.
- Hwaseong, South Korea (June 2024): An explosion and subsequent fire at a lithium battery factory resulted in 23 fatalities and eight injuries, underscoring the potential dangers associated with such facilities.
- Valley Center, California (September 2023): A fire erupted inside a battery storage container at the Valley Center Energy Storage Facility, leading to evacuations and shelter-in-place orders for nearby residents. This incident emphasized the risks of thermal runaway in lithium-ion batteries.
- Geelong, Australia (July 2021): During initial testing, a fire broke out in one of the Tesla Megapack modules at the Victorian Big Battery site. The fire took three days to extinguish, highlighting the challenges in controlling lithium-ion battery fires.

These incidents demonstrate the inherent risks of thermal runaway, fires, and explosions associated with lithium-ion batteries. Given Armour Township's rural setting, our emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders.

**Environmental Concerns:** The environmental impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental damage. Armour Township's pristine natural environment could face similar threats, with potential contamination of our air, soil, and water resources.

**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township. Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In light of these concerns, I urge the council to reject the proposal for the BESS in Armour Township. I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,



[Your Name]

KATRINE ON POAICO  
[Your Address (if applicable)]

[Your Contact Information]

RECEIVED  
APR 17 2025  
TOWNSHIP OF ARMOUR

David Luce

Subject: Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear  
Scott Aitchison, MP  
Graydon Smith, MPP  
Rod Ward, mayor  
Editor Great North arrow

I am writing to express my strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years.

Notably:

- Moss Landing, California (January 2025): A massive fire at one of the world's largest battery storage facilities led to the evacuation of approximately 1,500 residents due to toxic smoke. The incident highlighted the challenges in managing lithium-ion battery fires, which can emit harmful gases and are difficult to extinguish.
- Hwaseong, South Korea (June 2024): An explosion and subsequent fire at a lithium battery factory resulted in 23 fatalities and eight injuries, underscoring the potential dangers associated with such facilities.
- Valley Center, California (September 2023): A fire erupted inside a battery storage container at the Valley Center Energy Storage Facility, leading to evacuations and shelter-in-place orders for nearby residents. This incident emphasized the risks of thermal runaway in lithium-ion batteries.
- Geelong, Australia (July 2021): During initial testing, a fire broke out in one of the Tesla Megapack modules at the Victorian Big Battery site. The fire took three days to extinguish, highlighting the challenges in controlling lithium-ion battery fires.

These incidents demonstrate the inherent risks of thermal runaway, fires, and explosions associated with lithium-ion batteries. Given Armour Township's rural setting, our emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders.

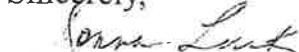
**Environmental Concerns:** The environmental impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental damage. Armour Township's pristine natural environment could face similar threats, with potential contamination of our air, soil, and water resources.

**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township. Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In light of these concerns, I urge the council to reject the proposal for the BESS in Armour Township. I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,



[Your Name]

[Your Address (if applicable)]

KATHERINE ON POA 160

[Your Contact Information]

## Charlene Watt (Deputy Clerk)

---

**From:** Paul Schaefer  
**Sent:** April 15, 2025 11:11 AM  
**To:** Charlene Watt (Deputy Clerk)  
**Subject:** BESS Battery storage

Good Morning

This email is in opposition to the proposed battery storage unit for Armour Township.

- Lack of Fire Training
- Lack of necessary equipment necessary to mitigate fire damage
- Lack of resources, manpower and water
- Lack of education for the Fire Department and Public
- Evacuation concerns
- Potential resources required from Automatic Aid partners potentially leaving their own municipality vulnerable
- Financial impact to neighbouring municipality for their Fire Department involvement
- Potential environmental concerns ie. Water runoff and forest fire spread.

These are just a few concerns against this project.

Sincerely,

Paul Schaefer  
Fire Chief  
Town of Kearney

## **Charlene Watt (Deputy Clerk)**

---

**From:** Amanda mashinte: -  
**Sent:** April 14, 2025 8:03 AM  
**To:** Charlene Watt (Deputy Clerk)  
**Subject:** Lithium battery energy storage system

Good morning,

I would like to express my serious concerns with the proposal for the new lithium battery energy storage system. Being an active member of the fire department and being present at the recent information session, I have great concern with this proposal and oppose it.

Thank you for listening to our concerns and taking everyone's concerns into consideration. If you need anything further from me please don't hesitate to reach out.

Amanda

## **Charlene Watt (Deputy Clerk)**

---

**From:** Carly Gordon ·  
**Sent:** April 14, 2025 8:31 AM  
**To:** Charlene Watt (Deputy Clerk)  
**Subject:** Lithium ion battery storage

Good morning, As an active member of the fire department I have great concern over the proposal of the lithium ion battery energy storage system and oppose this proposal.

Sent from my iPhone

## Charlene Watt (Deputy Clerk)

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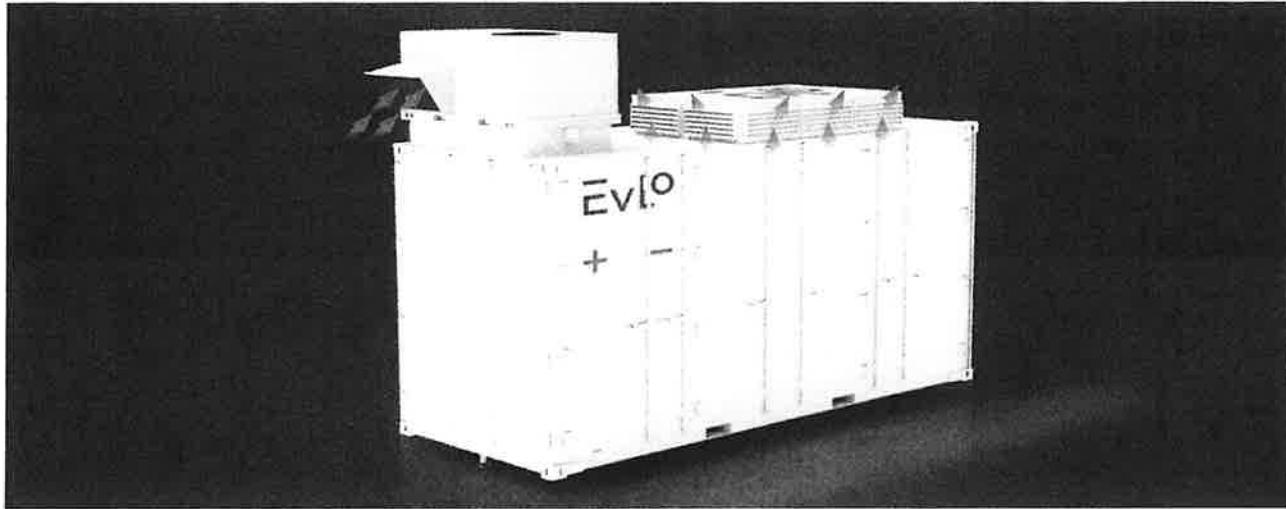
**From:** Krista MacLaren ·  
**Sent:** April 13, 2025 12:29 PM  
**To:** Charlene Watt  
**Subject:** Battery Lithium

To Whom it May Concern,

We are extremely opposed to the proposal of a battery storage unit for lithium batteries in our area. We have a permanent cottage on Three Mile Lake which we intend to share with our children and grandchildren of future generations. This would be harmful to our community and our environment. Please note that this is a very poor decision for Armour Township.

Thank you, Krista and Brooke MacLaren      Skyline Drive. Armour Twp.

Krista and Brooke MacLaren.  
Sent from my iPhone



## Leading-edge fire protection solutions at all levels

### Evolving EVLO security technologies

As renewable energy sources like wind and solar continue to grow, utility-scale energy storage systems are essential to ensure that homes, communities, and businesses can rely on a dependable supply of clean electricity. Lithium batteries' high energy density and long lifecycle make them a common choice for utilities to back up these renewable resources.

However, while we consider our lithium iron phosphate (LFP) battery chemistry to be safer than others, no battery is perfect and thermal runaway can, in rare cases, result in fires or explosions. This makes safety precautions paramount when designing battery energy storage systems (BESS).

Certification bodies such as UL and NFPA are also raising battery safety standards for the benefit of the industry.

As a subsidiary of Hydro-Québec, EVLO's engineers are keenly aware of utilities' needs regarding safety in BESS. We've developed a unique system of technical safety features at every level of our battery system: module, rack, and enclosure. From fire detection to thermal runaway prevention, our safety mechanisms both limit the risk of thermal runaway and, in case of an event, ensure that thermal propagation will be kept to a minimum and the event remains self-contained.



## Utility-Grade Safety, by Utility Professionals

EVLO's BESS are designed by engineers who are experienced with meeting utility-scale demands. Our engineers not only perform multiple simulations to create accurate models of gas emissions during thermal runaway, but also field test these designs as well. Since battery fire behavior varies extensively, they use these models to design mitigating measures for a wide variety of scenarios.

Working in collaboration with numerous globally respected and independent safety firms, we also conduct comprehensive and thorough analyses to provide further validation and confidence in our quest to build the safest BESS.

## Fire Mitigation Measures at Each Level

Unique in the battery industry, EVLO's next generation BESS contains fire mitigation protection mechanisms at every level above the cell level: module, rack, tray, and enclosure.

At the module level, thermal barriers are installed between the cells to slow down and prevent propagation to neighboring cells.

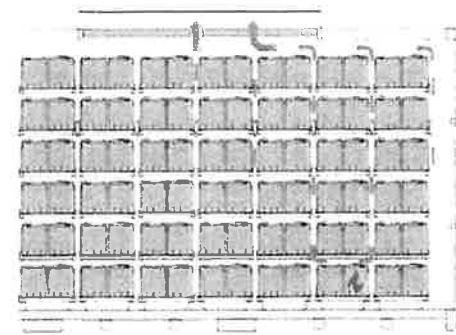
Each tray contains up to six modules. At the module level, thermal barriers are installed between cells to slow down and prevent propagation to neighboring cells.

The tray level includes two forms of fire protection: double thermal barriers between each tray, and the arrangement of the trays themselves. The design creates an air gap between each tray. In case of thermal runaway, this gap functions as a chimney by providing a path for gas release that avoids contact with nearby trays, therefore limiting temperature increase on neighboring modules.

At the enclosure level, there are hundreds of sensors as well as proprietary-designed venting panels. Once these sensors detect excess heat, smoke, or hydrogen, they trigger the active mitigation plan: the HVAC goes into Economizer Mode and forces fresh air in from outside the enclosure. Simultaneously, the venting panels open to release hot gas from the enclosure.

This system works even during power outages, since the venting panels include a failsafe

mechanism. In this condition, natural convection alone is enough to meet the performance requirements of NFPA 69.



## Why We Chose a Layered Approach to Fire Safety

The reason we chose to integrate both active and passive safety approaches with our BESS design is simple: to ensure that our BESS are as safe as possible.



The fire mitigation designs of battery energy storage enclosures are governed by NFPA 855, which approves two options to manage thermal runaway. NFPA 69 describes active approaches such as ours, in which the chimney-like design and vents provide ventilation for gas release. NFPA 68 details a passive approach that includes deflagration panels on the container.

Deflagration panels are sheets of metal that open and release pressure in case of an explosion. This method requires that the container's design withstand the initial pressure buildup, which ultimately tears the deflagration panel apart and releases the pressure. The process still allows an explosion, which doesn't allow for individual unit testing (because the process would destroy that unit). The resulting destruction makes it impossible to ensure that this method will work as intended for each unit.

These drawbacks led us to base our fire mitigation approach on NFPA 69, which makes use of sensors, can be tested on a unit-by-unit basis, and is designed to prevent explosions. Our approach also goes beyond NFPA 69's requirements because we add passive fire mitigation elements on top of our active strategies. Namely, the failsafe venting panels open by themselves to release pressure even during a power outage. We call this approach NFPA 69++.

Our fire mitigation designs also offer flexibility depending on users' different preferences and requirements. For example, some may need extra sensors, while others may want a different type of detection sensors depending on their climate or requirements. Our engineers can adapt these to meet the most stringent safety standards.

## The Most Thorough BESS Fire Prevention Testing Possible

Like all reputable BESS systems, our EVLO systems are tested using the UL 9540A test procedure – but we go far beyond the minimum requirements to ensure that our batteries are as safe as possible.

The UL 9540A test procedure is a set of tests for each succeeding level: cell, module, unit, and system. Currently, the minimum level lithium-ion batteries must pass is the unit level, so many lithium batteries are only tested up to that level. However, this level does not provide a full

engineering validation because it doesn't test all the safety features that must be implemented to meet the requirements of NFPA 855 68 and 69 sections.

Testing only up to the unit level also doesn't reflect all aspects of the real-life conditions within a BESS enclosure. A BESS's Fire Safety System depends on relationships between the cell, the module, the unit, the enclosure, detection hardware, mitigation hardware, and software. That's why we have developed our own Engineering Validation Plan consisting of a large scale fire test on a fully functional enclosure following UL 9540A system-level guidelines. This test validates the performance as well as active, passive and gas ignition modes.

So for us, UL 9540A testing is just one part of the complete Engineering Validation Plan that we provide for our products. Testing the entire system in real-life conditions ensures that our fire mitigation measures will perform reliably on our customer's sites under any circumstances.

## Keeping Firefighters Safe with Distant Fire Resolution

In most cases, our mitigation strategies end thermal runaway by evacuating gasses via the opened venting panels. The fire resolves itself without any need for extinguishing agents such as water, and operators can then replace the module and fuse to regain a functional system.

With this solution, firefighters aren't usually needed onsite as the fire is fully contained.

However, to provide maximum flexibility in safety measures, we also offer an optional dry pipe system inside the container. These pipes allow firefighters to connect to the Fire Department Connection (FDC) located away from the enclosure. Once the water's connected, it spreads sufficiently throughout the enclosure without flooding it. This limits the temperature rise and prevents the fire from spreading to nearby enclosures. If customers desire additional measures, the dry pipe option provides an extra layer of safety by enabling first responders to deal with out-of-control fires while keeping a safe distance and maintaining personnel safety.

## BESS Systems That Put Safety First

From product design through testing and performance, we've worked to make EVLO's BESS solutions the safest possible. Designed by engineers with extensive experience in utility environment and module design, they incorporate tailored fire mitigation measures from the module through the enclosure level. In addition to active mitigation measures that surpass NFPA 69 requirements, we've included passive measures that work even during loss of auxiliary power. Extensive field testing, including full engineering validation, helps ensure that EVLO's BESS solutions offer an unparalleled level of safety and reliability for our customers.

## Charlene Watt (Deputy Clerk)

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**From:** Don Mashinter  
**Sent:** April 11, 2025 1:26 PM  
**To:** Charlene Watt  
**Subject:** ATT Charlene Watt

I am writing to inform you that I am opposing the lithium battery storage units.

I am familiar with explosion lids and am concerned with the storage containers and elements of the winter that they will freeze and they won't explode properly and if they do the gases that are released are VERY toxic.

The toxic fumes coming off the cells (plastic etc ) would be hazardous to humans and a huge impact on the environment.

The leakage coming out of the container (which is toxic) , will leech into our water system,

There is no advantage or benefits to the Township of Armour as power is being transferred to another power station.

I am in close contact with someone who has a solar power farm that is owned by SOLAR BANK CORP, and this company does NOT do proper maintenance or regular maintenance checks.

Sincerely,  
Don Mashinter  
Elk Lake Rd  
Burks Falls

## **Charlene Watt (Deputy Clerk)**

---

**From:** Tracey Mashinter  
**Sent:** April 11, 2025 1:07 PM  
**To:** Charlene Watt  
**Subject:** ATT: Charlene Watt

I would like to have it on record that I strongly oppose the Lithium Battery Storage Unit in the Township of Armour.

It is not good for many, many reasons.

I am concerned about the environmental issues and risks it will cause and there are MANY.

Having a daughter who is a volunteer firefighter with a young family, I would not want her going to the scene. It is a very dangerous type of fire and can't be put out.

This area is known for its tourism and this will have damaging effects.

I have been doing research and there is no benefits whatsoever to the town,, just serious consequences that cannot be reversed.

The site is close to residential homes.

These are only some of the reasons I oppose this project.

The company that is proposing to set up this site, is not a reputable company, again raising more red flags.

We live in a township where there is clean air, and wildlife and clean water. Don't put this in danger because of money and greed.

Sincerely,

Tracey Mashinter  
Elk Road  
Burks Falls, Ontario

## Charlene Watt (Deputy Clerk)

---

**From:** d.harman d.harman <...>  
**Sent:** April 11, 2025 11:27 AM  
**To:** Charlene Watt (Deputy Clerk)  
**Subject:** Say NO Lithium battery storage system

My husband Dale Harman and I (Meri Helps) are AGAINST the BESS cited for 219 Peggs Mountain Road. Concerns are: Seepage into our lakes & rivers in the area that will pollute drinking water & deplete our wildlife. Unhealthy emissions polluting our fresh Northern air. Unwanted fires that will burn down forests & possibly homes nearby. Lithium batteries contain "hazardous metals" & if not properly taken care of they can cause safety issues. Batteries can ignite & cause horrific fires. Overcharging can cause them to catch fire or possibly explode. These batteries are listed as "hazardous material if being shipped. BESS batteries last between 5-15 years. Solid state batteries last longer & are safer because "fireproof" material is used in them. We hope these reasons will hopefully 'STOP' this storage system from taking place. Meri Helps Ontario Street Burks Falls On. P0A 1C0 Dale Harman , Ontario Street Burks Falls On. P0A 1C0

## Charlene Watt (Deputy Clerk)

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**From:** carrie schiffler  
**Sent:** April 11, 2025 10:28 AM  
**To:** Charlene Watt  
**Subject:** Attention: Charlene

Hi Charlene

I'd like it to be known that neither my husband, Rowan Hildebrand nor I, Carrie Schiffler support the proposed Lithium Battery Storage unit.

The potential threat to nearby residents and wildlife is enough to make me believe the risks far outweigh any benefits.

We live and pay taxes in the area.

Our address is 1 Skyline Dr  
POA 1L0.

Thank you.

Carrie Schiffler



**Village of South River**  
Burk's Falls – BESS Installation

Date: April 8, 2025

Motion Number: 121-2025

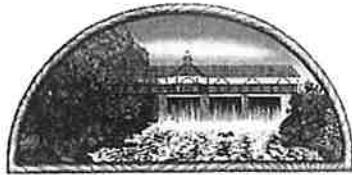
Moved By: John Brooks

Seconded By: Paula Scott

**BE IT RESOLVED THAT** the Council of the Village of South River does hereby support Burk's Falls Resolution # 2025-91 opposing a Battery Energy Storage System (BESS) development near urban areas and waterways, specifically the site plan proposed by Solar Bank Inc. for a BESS installation at Concession 6, Part Lot 3 on Pegg's Mountain Road and further that this resolution be circulated to all neighbouring municipalities in the Almaguin Highlands, MP Scott Aitchison, MPP Graydon Smith and the Ontario Minister of the Environment Hon. Andrea Khanjin.

Carried By: Tim Cunder

Lost By: \_\_\_\_\_



The Municipality of the  
**VILLAGE OF BURK'S FALLS**

Moved By: Ryan Baptiste Date: March 18, 2025  
Seconded By: Sean Cotton Resolution # 2025- 91

Be it resolved;

Whereas the review process has begun based upon the site plan proposed by Solar Bank Inc. for a BESS installation at Concession 6, Part Lot 3 on Pegg's Mountain Road, the Council of the Village of Burk's Falls seeks to communicate its position on the proposed location of the concept presented;

And whereas the proposed site is situated approximately a mile or less from the Village, and in a direction that is upwind of the Village for most of spring, summer and autumn seasons;

And whereas the proposed site is situated approximately a mile or less from the Magnetawan River, whose watershed runs from this place and through numerous municipalities and communities, down its natural course to the Georgian Bay shores;

And whereas the proposed site is uphill from the Magnetawan River watershed, and contains a watercourse running downhill directly towards the river;

And whereas battery storage facilities contain high levels of hazardous chemicals and materials, presenting a significant danger of environmental contamination from leaking, venting or fire, and posing a risk of catastrophic damage to our area;

And whereas new battery storage technology is in its infancy, and that overall safety protocols that govern such facilities is likewise in its early understanding and development;

By this resolution we indicate our firm opposition to this and any other battery storage or recycling facility situated so close to our homes and waterways, whose pristine existence, responsible maintenance and the diligent protection thereof, is of profound importance to our quality of life and livelihoods, not just in Burk's Falls but across the Almaguin Highlands.

While Council wholeheartedly supports the development of new, environmentally benign technologies and infrastructure that will benefit our communities, as stewards of our local land, air and water, the risks from situating such a potentially ruinous installation so close to the Village cannot be supported.

Furthermore, Council directs administration to communicate our position to all neighbouring municipalities in Almaguin, as well as our local MP and MPP and incoming Ontario Minister of the Environment.

Recorded Vote requested by: \_\_\_\_\_

Ryan Baptiste	for / opposed
Ashley Brandt	for / opposed
Sean Cotton	for / opposed
Nancy Kyte	for / opposed
Chris Hope	for / opposed

✓  
Carried

Defeated

Deferred

Pecuniary Interest declared by:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Mayor

*CRP Jr*

## Charlene Watt (Deputy Clerk)

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**From:** Hay email <dunner@hay.net>  
**Sent:** April 10, 2025 7:43 AM  
**To:** Charlene Watt  
**Subject:** Concerns RE: Battery storage

We are seasonal residents in Ryerson Twp along the Mag River. Our intent is to permanently move there in a few years once we are retired.

Now we have grave concerns on the proposed storage facility. Has the township thoroughly thought about this? The risks to our area including waterways, forested area and toxic emissions should there be an explosion? Is our fire department trained and capable of handling such a loss? How about the environment? Can you imagine our liability ramifications you will be responsible for?

It appears there are many in our community concerned about this and I question if their concerns are being addressed by these elected officials.

Please note, we oppose this.

Paula and Allan Dunn  
939 Springhill  
Burks Falls.  
Sent from my iPhone



**CORPORATION OF THE TOWNSHIP OF RYERSON**

**Date:** March 25, 2025

**Resolution Number:** R-57 - 25

**Moved by:** Councillor Robertson

**Seconded by:** Councillor Miller

**WHEREAS**, Solar Bank Corporation, has submitted an application to the Township of Armour for approval of a Battery Energy Storage System (BESS) to be located at Concession 6, Part Lot 3, 219 Peggs Mountain Road in Burk's Falls; and

**WHEREAS**, Armour Township is encouraging public engagement and the concerns from the surrounding Townships who share infrastructure and the waterway; and

**WHEREAS**, the Township of Ryerson has received information from their ratepayers through delegations to Council and correspondence regarding the risks associated with BESS and of the opposition to the proposal from our community; and

**WHEREAS**, the Township of Ryerson recognizes the critical importance of safeguarding the health, safety, and well-being of the members of this community and surrounding communities, and of its firefighters, and acknowledges the potential risks associated with the proposed Battery Energy Storage System (BESS); and

**WHEREAS**, the Township of Ryerson's fire department has expressed significant concerns regarding the safety of firefighting operations in the event of a fire involving a Battery Energy Storage System (BESS), which could pose unique and hazardous challenges; and

**WHEREAS**, the proposed BESS site is located within a high-risk wildland fire zone, where the presence of such a facility could increase the risks to firefighting personnel, requiring specialized training and equipment not currently available to the Township's fire department; and

**WHEREAS**, in the event of a fire at the proposed BESS facility, traditional firefighting methods such as the application of water may be ineffective and could lead to contaminated lithium-ion firewater runoff that would pose a significant environmental threat to ground and water courses, particularly to the nearby Magnetawan River, a vital water source for the region; and

**WHEREAS**, it is a potential hazard, and because battery storage technology is in its infancy and its unknown what the long-term environmental impact of proposed BESS facility would be.

**WHEARAS**, from a coverage standpoint regarding the municipal liability policy and the possible risk of a third-party claim received due to firefighting activity releasing pollutants, the added likely policy response for environmental liability coverage, and the increased cost to the fire departments for this added coverage.

**NOW, THEREFORE, BE IT RESOLVED THAT:**

1. The Township of Ryerson Council, by way of this resolution indicate our firm opposition to the application submitted by Solar Bank Corporation for a Battery Energy Storage System (BESS), due to the risk of hazardous chemical contamination and the harm that would cause to the Almaguin Area, the community, the environment, and the added risks to the fire services.
2. A copy of this resolution be sent to the Planning Board of Ryerson Township for their records and consideration in evaluating the proposal, with a strong recommendation to take these safety and environmental concerns into account.
3. The Township of Ryerson shall notify Armour Township of our opposition to the application; by sending a copy of this resolution and a written submission to Armour Twp. in opposition to the proposed amendments, so we are entitled to appeal the decision.
4. The Township of Ryerson shall notify neighboring municipalities of Ryerson's opposition to the application and encourage them to consider these risks in their own assessments of the proposal.

Carried  Defeated



(Chair Signature)

Declaration of Pecuniary Interest by: \_\_\_\_\_

RECORDED VOTE					
Vote called by Clerk in random order, Chair to vote last					
Members of Council		Yea	Nay	Abstention	Absent
Councillors	Beverly Abbott				
	Glenn Miller				
	Delynne Patterson				
	Dan Robertson				
Mayor	George Sterling				



28 Midlothian Road, R.R. No. 1, BURK'S FALLS, ONTARIO P0A 1C0

705-382-3232 • Fax 705-382-3286 • [www.ryersontownship.ca](http://www.ryersontownship.ca)

**March 26, 2025**

**The Township of Armour**  
**Attention: Mrs. Charlene Watt**  
**Township of Armour**  
**Burk's Falls, ON, P0A 1C0**

**SEPSD Planning Board**  
**Attention: Linda Moyer**  
**8 Main Street, PO Box 310 Kearney,**  
**ON, P0A 1M0**

**Re: Opposition to the Battery Energy Storage System (BESS) Applications OPA-2025-01, and ZBA-2025-01 by Solar Bank Corporation.**

Dear Members of the Southeast Parry Sound District Planning Board and Armour Township,

I am writing on behalf of the Township of Ryerson to formally express our opposition to the application submitted by Solar Bank Corporation for approval of a Battery Energy Storage System (BESS) at 219 Peggs Mountain Road, Burk's Falls. Our municipality has significant concerns regarding the safety, environmental, and operational risks associated with this proposal, which we believe could negatively impact not only the Township of Ryerson but the entire Almaguin area.

The Township of Ryerson is deeply committed to safeguarding the health, safety, and well-being of its residents, including our first responders. The Township's fire department has raised serious concerns about the potential hazards associated with firefighting efforts in the event of a fire involving the BESS. Traditional firefighting methods, such as water application, are ineffective against lithium-ion fires, which may lead to severe environmental contamination. The risk of lithium-ion firewater runoff is especially concerning due to its potential to reach the Magnetawan River, a vital water source for the region.

Furthermore, the proposed site is located within a high-risk wildland fire zone, which exacerbates the risks to both firefighting personnel and community safety. At present, the Township's fire department lacks the specialized training and equipment needed to manage such incidents effectively. We believe that introducing this facility could place both our residents and first responders in grave danger. We are also concerned about the long-term environmental impacts of the proposed BESS. Given that battery storage technology is still in its infancy stages, the full extent of its environmental

consequences remains unknown. The potential for unforeseen environmental harm necessitates additional caution and evaluation before proceeding with the project.

The Township of Ryerson also wishes to highlight the potential financial burden that may result from this project, particularly in terms of increased insurance costs for fire services. The need to secure specialized coverage for environmental liabilities and third-party claims related to firefighting activities will likely result in exclusions in liability, including issues concerning PFAS chemicals and electrical power supply. Additionally, the Township's volunteer firefighters would face an additional burden of training hours outside of their regular commitments, which would cut into valuable family time and personal obligations. While the proposal mentions that the applicant will provide training and equipment, there is no indication of who will compensate the firefighters for their time spent on this extra training.

In light of these concerns, the Township of Ryerson respectfully urges the SEPSD Planning Board and Armour Township to carefully consider the risks associated with the proposed Battery Energy Storage System (BESS) when assessing this application.

While the Township of Ryerson recognizes and supports development initiatives that contribute positively to our community's well-being, we must also ensure that such projects align with the long-term goals of our residents. We are committed to promoting responsible and sustainable development that balances the economic, social, and environmental needs of our community, while prioritizing public safety and environmental stewardship.

We trust that you will give thoughtful consideration to our concerns and act in the best interests of our communities. A copy of this letter has been circulated to the Southeast Parry Sound District Planning Board and neighboring municipalities to notify them of our opposition.

Thank you for your attention to this important matter.

Sincerely,



George Sterling  
Mayor, Ryerson Township

Keisha Rumford

Burks Falls, ON  
P0A1C0

Township of Armour  
56 Ontario St,  
Burks Falls, ON  
P0A1C0

April 8, 2025

To Whom It May Concern,

I am writing to express my strong opposition to the proposal to bring a lithium battery storage facility to Armour Township as a taxpayer. This project will line the pockets of a few while jeopardizing an entire community whose resources and emergency services are already minimal!

Lithium battery storage facilities pose dangers, including fire and explosion risks due to thermal runaway. Fires and thermal runaway can release toxic and flammable gases, posing a hazard to firefighters and those nearby. A fire in one battery can trigger a chain reaction, causing multiple batteries to fail and increasing the risk of a large-scale fire or explosion. If batteries are improperly disposed of or leak, the toxic materials they contain can contaminate soil and water. Lithium-ion battery fires can be difficult to extinguish due to the high temperatures and the continued chemical reactions, potentially requiring prolonged water cooling to prevent re-ignition.

As previously stated, I strongly oppose this project. The risks heavily outweigh any benefits this endeavor would bring to the community. In fact, it is nothing but a liability and a hindrance to the future development of Armour Township.

Sincerely,  
Keisha Rumford

## Charlene Watt (Deputy Clerk)

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**From:** Denise Simpson  
**Sent:** April 9, 2025 12:37 AM  
**To:** Charlene Watt  
**Subject:** Re: Lithium Battery Storage

April 8, 2025

Charlene Watt, Clerk

I am formally submitting my vehement opposition to the Armour Lithium Battery Storage proposal.

I am a long standing resident of the Burks Falls community. I am deeply concerned about this proposal. The risks far outweigh any advantages in my opinion. I hope Armour Township will consider the evidence based fear this has incited and administer a filter that promotes ecological and environmental accountability while reducing catastrophic risk to humans and wildlife.

My 18 month old grandson resides a few houses away from Mr. Creasor's property, the proposed building site. I am worried sick that he and my daughter will be human experiments in this endeavour. My mother, a senior must live her days stressed about a possible fire or worse happening just up the road from her residence.

I ask you, what could be worse than living in a state of chronic anxiety?

We know the risks, why invite them into our community and destroy one of our primary revenue streams, tourism.

I want Armour Township to support the community and foster environmental and safety protocols.

I welcome opportunity, development and growth, but not when the reality contains future obituaries, illness and the destruction of our water and land, precious resources to gamble away on a short sighted whim.

Stand with us, hear us Armour.

Sincerely,

Denise Simpson  
Burks Falls

Sent from my iPhone

## Charlene Watt (Deputy Clerk)

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**From:** W Trevor Claxton  
**Sent:** April 9, 2025 6:51 AM  
**To:** Charlene Watt  
**Subject:** Lithium Battery plant; Attention Charlene

Good Morning:

I wanted to send an email to state my concern about the lithium battery plant that is being considered in Armour Township. The fire risks alone would give me concerns about this plant. In addition, there are no full time firefighters available to deal with any accidents that occur. As an aquatic biologist, I am also concerned about chemical and lithium contamination of ground water and lakes and rivers. Therefore, I and my wife are opposed to this project

Thank you for your consideration

W. Trevor Claxton  
Michelle Matthews  
Snowshoe Lane, Katrine

Good morning - this is not a political rant. It is just information regarding the battery backup that was proposed last night at the Katrine community center.

Armour Township has advised that your voice and opinion needs to be put down in an email for council. If you are opposed to the battery back up being situated in our area, YOU MUST send an email stating your opinion to the email address below. I would suggest including your name and address so they know it is coming from a taxpayer locally.

Wishing you all a wonderful day in this beautiful north.

Attention Charlene  
[clerk@armourtownship.ca](mailto:clerk@armourtownship.ca)  
Sent from my iPhone

## **Charlene Watt (Deputy Clerk)**

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**From:** Kimberly Porter  
**Sent:** April 8, 2025 3:35 PM  
**To:** Charlene Watt  
**Subject:** Battery Back Up

Hi Charlene,

I am just emailing in regards to the battery back up centre proposed out Pegs Mountain and as an armour township resident I feel the need to express my disinterest for the station after the presentation last night I am against the proposed centre in Armour Township.

Thank you

Kim Porter  
Magview Drive  
Armour Township

## **Charlene Watt (Deputy Clerk)**

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**From:** Louise Fry  
**Sent:** April 8, 2025 10:54 AM  
**To:** Charlene Watt  
**Subject:** Attention: Charlene

We Laverne and Louise Fry are saying no and do not want the Lithium Battery Storage in our community and also they say that our fire fighters would take training to handle what ever might result in something going wrong why would we want them to be trained in this when they are not even trained to rescue people or animals off the ice or out of water which should be something they are trained for and take priority in this community. Having this battery storage in our community is just a match waiting to be lit. Yours truly Laverne and Louise Fry First Avenue in Armour Township

## Charlene Watt (Deputy Clerk)

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**From:** Christine Lauffer  
**Sent:** April 8, 2025 11:15 AM  
**To:** Charlene Watt  
**Subject:** BESS

Dear Clerk and Council,

After the information meeting I have no problem with having the BESS in Armour Township. As we all use more electricity and as we are a growing community, it makes good sense to install a battery system that will help with high demand situations. I have been convinced by listening to the presentation that the BESS will not cause an environmental problem but that it will actually help to mitigate the climate crisis. Therefore I am in favour to install it in Armour Township.

Sincerely

Christine Lauffer  
Armour Township  
Sent from my iPhone

*Support*

## **Charlene Watt (Deputy Clerk)**

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**From:** Wendy Mahoney  
**Sent:** April 8, 2025 10:41 AM  
**To:** Charlene Watt  
**Subject:** Battery Backup plant

My husband and I are opposed to this plant being built in our area  
Richard and Wendy Mahoney  
Shady Lane  
Katrine On

## Charlene Watt (Deputy Clerk)

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**From:** Jim Price  
**Sent:** April 8, 2025 10:34 AM  
**To:** Mayor Rod Ward; Gina Price; Councillor Jerry Brandt; Councillor Rod Blakelock; Councillor Dorothy Haggart-Davis; Councillor Wendy Whitwell  
**Cc:** Dave Gray; Charlene Watt; Dane Renneberg  
**Subject:** Re: Proposed Lithium BESS concerns

Dear Mayor Ward:

Thank-you for your participation in the meeting last night. Despite the technical issues and the disorganized questions, there was a lot of good information passed along and good learning that took place.

I appreciate your honesty and all the work that you and the township has put into this project. Thank-you for reminding us that the township has not voted on this proposal yet and for your desire to receive all information first. This shows leadership.

While my wife and I along with our neighbors on Madill Road were quiet this was more due to the nature of the meeting and out of respect for the presenters more than anything else.

We did gleam out several points while watching:

1. Most of the safety codes for these facilities have been developed over the last 5 years. This was alarming for me to learn last night, knowing that they have not been around long enough to be properly stress tested.
2. That while the various battery companies have learned a lot from past fires, there is still a lot that needs to be learned as this technology develops.
3. While fire fighting experts were brought in to the meeting, there was certainly a lot of confusion about how to handle a potential fire at the site and who or what training would be needed and what equipment and supplies would be needed. This remains a significant concern for us that a fire could overwhelm our small fire department and our volunteers.
4. While the initial proposal is for a small operation, it would be naive for us to think that if an installation were to be approved that the company would not come back later to have it expanded.
5. The main benefit for Armour township that was touted was stability of the electrical supply in our area. Unfortunately there was no one from Hydro One at the meeting that could verify these claims and given that the expert consultants brought in were fire fighters and folks from the battery companies, they were not qualified to make such claims. No one at the meeting should be comfortable with this claim.
6. The company made the claim at the start of the meeting that the province has a shortage of electricity and demand is growing exponentially. While this was the thesis only a couple of years ago, these claims are actually in question now. As a result of the tariff issues south of the border, we now have learned that the province produces more electricity than it needs and in fact sells their excess to the States at a discount. As you know this sale of electricity is now in question and if pulled back would mean that the province would not need marginal additional supply. From the demand side, over the last 6 months we have seen a significant slow down in the adoption of electric vehicles and significant performance gains in in generative A.I. which may lead to a significant reduction in electricity demand

from these two big user groups. As a result, the question of financial viability of a project like this long term needs to be brought into question.

We heard you loud and clear that even a negative vote by the township may not kill this deal as the company would have the right to appeal. We also realize that a strong position by council would be significant in any appeal process and make it much harder for them.

At the end of the day our elected officials are here to represent the constituents of this community. I do think that a room full of people both present and on-line, all opposed to this, conveys the sentiment of the residents of this township.

We love this area, it's natural beauty and pristine environment. It did not go by unnoticed by me that while we were driving to the meeting last night, four young deer crossed the road in front of us, coming up from the public beach, literally walking through people's back yards. It was a reminder for me that we are not doing this just for ourselves but for all the residents of this area, be it two legged or four.

We know that there is a lot of work to be done, and it is at this time that we look for our leaders to lead and are confident that you and rest of council will step up for us now.

Jim & Gina Price  
Madill Road

## Charlene Watt (Deputy Clerk)

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**From:** jaye skeoch  
**Sent:** April 8, 2025 10:26 AM  
**To:** Charlene Watt  
**Subject:** Against Lithium Battery Storage in Armour

This letter acts as my registration and opposition to building a lithium battery storage unit in Armour.

These batteries are highly flammable and release toxic chemicals into the environment. They contain metals such as cobalt and nickel which will contaminate the ground water and will seep into our water systems.

This isn't "progress". This is knowingly playing with fire and putting human, animal and plant life at risk.

And as an aside - this will also affect house prices especially in that immediate region and perhaps ranging as far as Doe Lake itself. I live here now but I wouldn't buy here again if this storage facility was that close.

Jaye Skeoch-Brewer  
Doe Lake Rd, Katrine

## **Charlene Watt (Deputy Clerk)**

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**From:** sharon  
**Sent:** April 8, 2025 10:05 AM  
**To:** Charlene Watt  
**Subject:** Attention Charlene Watt

Hi I am a Resident of Ryerson Township and I would like to share my opinion to the Armour Council that I am opposed to the Bess Lithium Storage Site proposed in Armour Township.

I do not see how allowing this Site to exist benefits myself, People in my Township or the surrounding Communities . I only see Negatives and Risks. No Jobs created, it shouldn't be in a Residential Area, It is close to a nearby Village, Close to River System as well. Risks far outweigh the Benefits.

Thank you

William and Sharon Haslam

. Midlothian Rd Burks Falls.

## Charlene Watt (Deputy Clerk)

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**From:** Robert Baron  
**Sent:** April 8, 2025 10:09 AM  
**To:** Charlene Watt  
**Subject:** Battery Facility on Pegs Mountain Road

Dear Armour Township Council

My name is Robert Baron and I cottage and will eventually live up at Pickerel and Jack Lake Road. We are currently finishing a brand new build. My family has been at this location going on 53 years so we are like a three season resident.

I attended last nights information session via Zoom and was not impressed by the presentation and lack of ability to get solid or straight answers from the group.

I am writing this to let you know that I and my family are opposed to this facility being built in our community. You saw the passion of your community in action last night and we all hope that council makes the right decision on this for the community and that you listen to the community.

A wrong decision could potentially be a disaster for the area.

Thanks for your commitment to gathering information and being present to see how the community feels about this facility being in the area.

Regards,

Robert Baron

## **Charlene Watt (Deputy Clerk)**

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**From:** Justin O'BRIEN  
**Sent:** April 8, 2025 9:07 AM  
**To:** Charlene Watt  
**Subject:** Completely opposed to battery back up plant

Good morning Charlene, this is Justin O'Brien. I live at Melody Crescent in Katrine.

My wife and I watched the meeting last night through Zoom and we are completely 100% opposed to any plant being situated in this area regarding the battery back up. We moved here one year ago for clean living with forestry, wildlife, and clean drinking water and any risk that this plant could have to destroy that is something we are not prepared to take. Based on everyone at the meeting and online, it appears no one wants that battery plant in this area.

Can you kindly email back to confirm receipt so I know that my voice has been heard for council. Thank you so much.  
😊

Kindest regards, Justin

## **Public Comments from the April 7, 2025 Public Information Session Regarding the Proposed BESS Development:**

### **1. No Environmental Impact Study Completed**

Several participants expressed concerns that no comprehensive environmental impact assessment (EIA) had been conducted prior to the proposal of the BESS project. An EIA is crucial to evaluate the potential risks and long-term consequences on local ecosystems, wildlife, and natural resources. Without this study, the public is left uncertain about the sustainability and environmental footprint of the project.

### **2. Recommendations for Phase 2 Removed in Initial ESA Report**

It was noted that key recommendations for Phase 2 of the project were removed from the initial Environmental Site Assessment (ESA) report. These omitted recommendations could be critical to the safe development and operation of the BESS system, and their absence raises concerns about whether adequate planning and risk mitigation strategies are in place for potential long-term impacts.

### **3. SolarBank Evaded the Use of the Term 'Lithium'**

Public comments highlighted that SolarBank, the developer, avoided explicitly using the term "lithium" when discussing the energy storage technology to be used in the BESS. Lithium batteries are commonly used in energy storage systems, but there are growing concerns about the environmental impact and sustainability of lithium mining. Transparency in describing the technology being employed is essential for public confidence.

### **4. Design of BESS to Allow for Explosion, but Not Tested – Concerns About Safety**

One significant safety concern raised was that the design of the BESS system accounts for the possibility of an explosion but has not undergone sufficient testing. The public expressed apprehension about the potential for catastrophic failure in the event of a malfunction, particularly given the volatility of battery technologies. Without proven reliability and safety measures, there is uncertainty about whether this method of containment would function as intended during an emergency.

### **5. Proposed Placement of BESS 900 Metres from the Magnetawan River on a Hill with a 20-Metre Drop**

The proposed site for the BESS is located 900 metres from the Magnetawan River, on a hill with a 20-metre vertical drop. This topography could complicate construction, introduce drainage issues, and increase the risk of environmental contamination in case of a spill or fire. The close proximity to the watercourse raises concerns about potential impacts on water quality and local aquatic ecosystems.

### **6. Prevailing Wind Direction Toward the Village of Burk's Falls**

The prevailing wind direction toward the village of Burk's Falls was flagged as an issue, particularly in the event of a fire or chemical leak from the BESS. Wind can carry harmful substances, smoke, and fumes to residential areas, posing significant health and safety risks for local inhabitants.

### **7. Concerns Over New Fire Station and Proposed Medical Wellness Centre Within 500 Metres**

Several attendees voiced concerns about the proximity of the proposed BESS to critical infrastructure, including a new fire station and a proposed medical wellness centre. Being

located within 500 metres of these facilities could compromise emergency response times and safety protocols, especially in the event of a fire or hazardous material spill.

**8. No Access to Municipal Water – Dependence on Fire Tanker Shuttles**

The BESS site does not have direct access to municipal water, which would necessitate reliance on continuous fire tanker shuttles for firefighting efforts. This presents a logistical challenge and strains local fire services, including mutual aid agreements with neighboring municipalities. The ability of local departments to effectively respond to emergencies at the site is called into question.

**9. Partnering Municipalities Oppose the Development**

Municipalities that share fire services under the TRI Services Agreement have officially opposed the BESS development. The shared concern revolves around the ability of fire departments to adequately respond to incidents at the proposed site, given the distance from other critical infrastructure and the risks posed by the proposed technology.

**10. Wildland Fire – High-Risk Zone**

The proposed BESS site lies within a high-risk wildland fire zone. This increases the potential for fires to spread to and from the site, particularly during dry conditions. The combination of local vegetation, proximity to residential areas, and the volatile nature of battery technology heightens the overall fire risk.

**11. Hayfield Adjacent to the Property**

A hayfield is located directly adjacent to the proposed BESS site. This could increase the likelihood of a fire spreading from the BESS to the field, particularly during dry weather or in the case of an undetected fire. The presence of flammable vegetation nearby increases the safety hazards associated with the development.

**12. Negative Impact on Insurance – Residents and Fire Departments**

There are concerns that the presence of a BESS facility could lead to higher insurance premiums for both local residents and fire departments. Insurance companies may view the BESS as a high-risk facility, which could result in higher costs or even a lack of coverage in the event of a fire or catastrophic failure.

**13. Negative Impact on Future Land Development – Restrictions for Neighbors**

Local residents expressed concerns that the construction of the BESS could impose restrictions on future land development. Specifically, an abutting neighbor may be unable to pursue plans to create a subdivision due to the potential risks and zoning restrictions associated with the presence of an energy storage facility. This could affect property values and long-term planning in the area.

**14. Fire Representative's Opinion – BESS Units Should Not Be in Residential Areas**

A representative from the Fire Risk Alliance (FRA) advised local residents in one-on-one discussions that energy storage units, particularly those involving lithium-ion batteries, should not be placed in residential areas. The FRA representative emphasized that such facilities are more appropriately located in industrial zones, where the risks can be better managed and mitigated.



**CORPORATION OF THE TOWNSHIP OF RYERSON**

**Date: March 25, 2025**

**Resolution Number: R- 57 - 25**

**Moved by:** Councillor Robertson

**Seconded by:** Councillor Miller

**WHEREAS**, Solar Bank Corporation, has submitted an application to the Township of Armour for approval of a Battery Energy Storage System (BESS) to be located at Concession 6, Part Lot 3, 219 Peggs Mountain Road in Burk's Falls; and

**WHEREAS**, Armour Township is encouraging public engagement and the concerns from the surrounding Townships who share infrastructure and the waterway; and

**WHEREAS**, the Township of Ryerson has received information from their ratepayers through delegations to Council and correspondence regarding the risks associated with BESS and of the opposition to the proposal from our community; and

**WHEREAS**, the Township of Ryerson recognizes the critical importance of safeguarding the health, safety, and well-being of the members of this community and surrounding communities, and of its firefighters, and acknowledges the potential risks associated with the proposed Battery Energy Storage System (BESS); and

**WHEREAS**, the Township of Ryerson's fire department has expressed significant concerns regarding the safety of firefighting operations in the event of a fire involving a Battery Energy Storage System (BESS), which could pose unique and hazardous challenges; and

**WHEREAS**, the proposed BESS site is located within a high-risk wildland fire zone, where the presence of such a facility could increase the risks to firefighting personnel, requiring specialized training and equipment not currently available to the Township's fire department; and

**WHEREAS**, in the event of a fire at the proposed BESS facility, traditional firefighting methods such as the application of water may be ineffective and could lead to contaminated lithium-ion firewater runoff that would pose a significant environmental threat to ground and water courses, particularly to the nearby Magnetawan River, a vital water source for the region; and

**WHEREAS**, it is a potential hazard, and because battery storage technology is in its infancy and its unknown what the long-term environmental impact of proposed BESS facility would be.

**WHEARAS**, from a coverage standpoint regarding the municipal liability policy and the possible risk of a third-party claim received due to firefighting activity releasing pollutants, the added likely policy response for environmental liability coverage, and the increased cost to the fire departments for this added coverage.

**NOW, THEREFORE, BE IT RESOLVED THAT:**

1. The Township of Ryerson Council, by way of this resolution indicate our firm opposition to the application submitted by Solar Bank Corporation for a Battery Energy Storage System (BESS), due to the risk of hazardous chemical contamination and the harm that would cause to the Almaguin Area, the community, the environment, and the added risks to the fire services.
2. A copy of this resolution be sent to the Planning Board of Ryerson Township for their records and consideration in evaluating the proposal, with a strong recommendation to take these safety and environmental concerns into account.
3. The Township of Ryerson shall notify Armour Township of our opposition to the application; by sending a copy of this resolution and a written submission to Armour Twp. in opposition to the proposed amendments, so we are entitled to appeal the decision.
4. The Township of Ryerson shall notify neighboring municipalities of Ryerson's opposition to the application and encourage them to consider these risks in their own assessments of the proposal.

Carried  Defeated



(Chair Signature)

Declaration of Pecuniary Interest by: \_\_\_\_\_

RECORDED VOTE					
Vote called by Clerk in random order, Chair to vote last					
Members of Council		Yea	Nay	Abstention	Absent
Councillors	Beverly Abbott				
	Glenn Miller				
	Delynne Patterson				
	Dan Robertson				
Mayor	George Sterling				

## Charlene Watt (Deputy Clerk)

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**From:** Gary Firby  
**Sent:** March 29, 2025 6:59 PM  
**To:** Charlene Watt  
**Subject:** Regarding proposed Bess facility on Peggs Mountain Rd in Armour township  
i'm against this proposed building site for the possible environmental impact that this facility could pose to our area i live on the Mag. river at the ...

Sent from my iPhone

Sent from my iPhone

Sent from my iPhone



The Municipality of the  
**VILLAGE OF BURK'S FALLS**

172 Ontario Street Box 160 Burk's Falls ON P:705-382-3138 F:705-382-2273 [www.burksfalls.net](http://www.burksfalls.net)

March 26, 2025

To the Mayor, Council & Administration of the Municipality of Armour Township, Greetings:

Please be advised that the Council of the Village of Burk's Falls, through a unanimous Resolution of Council (see attached), makes clear its full and unequivocal opposition to the complete applications of an OPA and Rezoning for the BESS (Battery Electric Storage System) proposed for Concession 6, Part Lot 3 on Pegg's Mountain Road.

This opposition is based upon the following:

1. Proximity to the Village, with prevailing winds coming from the direction of the proposed site for most of the year.
2. Proximity to the Magnetawan River and its watershed. In addition, the current site plan notes a water course running through the site and downhill directly towards the Magnetawan watershed.
3. The close installation of such toxic and flammable materials (lithium, etc.), with many of them proven carcinogens, could contaminate the entire surrounding ecosphere should a major fire or venting incident take place. As with any such industrial contamination, the damage to our local environment would likely be generational.
4. Battery storage system technology is in its infancy, with few studies or safety protocols properly studied and efficiently established. Battery Fires are all too common and there is no set emergency protocol to easily control or extinguish them.
5. While cost is obviously of secondary consideration in the face of such overt risks to our shared quality of life and health safety, the costs of upgrading our shared emergency services to deal with such a facility has not been sufficiently studied, nor any costs associated with the need for advanced skills, equipment and personnel. These costs alone could be considerable.

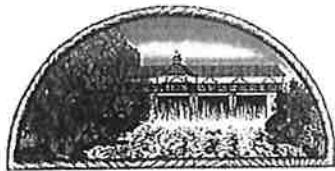
By this resolution we indicate our firm opposition to this and any other battery storage (or recycling facility) situated so close to the Village and surrounding homes and waterways.

While the Village Council is aware that the review process for Solar Bank's application has only just begun, we kindly request to be kept fully up to date on all developments, changes in application and public meetings and planning discussions involved with this project.

Thank you for your kind attention in this matter, and we look forward to future dialogue with you towards a resolution that will align fully with the wishes of area residents.

Kindest regards;

C. R. Hope  
Mayor, Village of Burk's Falls



The Municipality of the  
**VILLAGE OF BURK'S FALLS**

Moved By: Ryan Baptiste Date: March 18, 2025  
Seconded By: Sean Cotton Resolution # 2025- 91

Be it resolved;

Whereas the review process has begun based upon the site plan proposed by Solar Bank Inc. for a BESS installation at Concession 6, Part Lot 3 on Pegg's Mountain Road, the Council of the Village of Burk's Falls seeks to communicate its position on the proposed location of the concept presented;

And whereas the proposed site is situated approximately a mile or less from the Village, and in a direction that is upwind of the Village for most of spring, summer and autumn seasons;

And whereas the proposed site is situated approximately a mile or less from the Magnetawan River, whose watershed runs from this place and through numerous municipalities and communities, down its natural course to the Georgian Bay shores:

And whereas the proposed site is uphill from the Magnetawan River watershed, and contains a watercourse running downhill directly towards the river;

And whereas battery storage facilities contain high levels of hazardous chemicals and materials, presenting a significant danger of environmental contamination from leaking, venting or fire, and posing a risk of catastrophic damage to our area;

And whereas new battery storage technology is in its infancy, and that overall safety protocols that govern such facilities is likewise in its early understanding and development;

By this resolution we indicate our firm opposition to this and any other battery storage or recycling facility situated so close to our homes and waterways, whose pristine existence, responsible maintenance and the diligent protection thereof, is of profound importance to our quality of life and livelihoods, not just in Burk's Falls but across the Almaguin Highlands.

While Council wholeheartedly supports the development of new, environmentally benign technologies and infrastructure that will benefit our communities, as stewards of our local land, air and water, the risks from situating such a potentially ruinous installation so close to the Village cannot be supported.

Furthermore, Council directs administration to communicate our position to all neighbouring municipalities in Almaguin, as well as our local MP and MPP and incoming Ontario Minister of the Environment.

Recorded Vote requested by:

Ryan Baptiste	for / opposed
Ashley Brandt	for / opposed
Sean Cotton	for / opposed
Nancy Kyle	for / opposed
Chris Hope	for / opposed

Carried       Defeated       Deferred

*Pecuniary Interest declared by:*

1. Documentary \_\_\_\_\_

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\_\_\_\_\_  
Mayor

## Charlene Watt (Deputy Clerk)

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**From:** rpm  
**Sent:** March 17, 2025 2:56 PM  
**To:** Armour Township Clerk  
**Subject:** Opposed to Proposed Lithium Battery Storage Facility in Armour Township

Hello Charlene

I am writing to show my opposition the proposed battery storage facility in Armour Township. Everyone in Armour Township deserves to have this pristine area preserved by not having a dangerous lithium battery storage facility. This type of facility does not fit with the area where the build is being proposed. The outcome is catastrophic for the area if this facility fails. Run off to the waterways is the first thing that comes to mind. There is no way to contain the hazardous chemicals that are released during a fire. Containing the blaze is only the beginning of the disastrous result of a fire.

Please reject the proposal for the Lithium Battery Storage Facility in Armour Township.

Sincerely

Richard Misler

Ferguson Road

Katrine, ON

## Charlene Watt (Deputy Clerk)

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**From:** Ana Cultraro  
**Sent:** March 12, 2025 11:11 AM  
**To:** Armour Township Clerk  
**Cc:** Ana Cultraro  
**Subject:** My opposition to the BESS proposal in Armour Township

Hi Charlene,

I am writing to you and the Armour Township Council to signal my opposition to the proposed Battery Energy Storage System (BESS).

As a concerned resident of Ryerson Township, I want to express my strong opposition as we will suffer the same risks due to our proximity. It will impact all surrounding communities.

While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

### PUBLIC SAFETY

With regards to public safety risks, lithium battery storage facilities have been associated with over 30 recorded serious large-scale BESS fires that have happened globally in recent years.

[https://storagewiki.eprisite.com/index.php/BESS\\_Failure\\_Incident\\_Database](https://storagewiki.eprisite.com/index.php/BESS_Failure_Incident_Database)

January 2025, Moss Landing, California: A massive fire at one of the world's largest battery storage facilities led to the evacuation of approximately 1,500 residents due to toxic smoke. The incident highlighted the challenges in managing lithium-ion battery fires, which can emit harmful gases and are difficult to extinguish.

It reignited again this month as smouldering lithium-ion batteries caught fire again.

And the Monterey estuary, a fragile ecosystem was discovered to have a high concentration of heavy metals from the fire.

<https://ctif.org/news/fire-largest-bess-us-led-evacuation-1500-residents-near-moss-landing-fire-left-burn-out>

<https://www.latimes.com/california/story/2025-01-29/heavy-metals-found-in-monterey-estuary-after-moss-landing-lithium-battery-fire>

September 2024, Brantford ON: A fire at Aypa Power Canada's storage facility saw flames contained to one unit and thankfully no injuries. The cause is still being investigated. According to a spokesperson for the Ministry of Environment, firewater runoff from the site impacted a retention pond as well as a nearby creek. The Fire Chief said the protocol for dealing with such a battery fire is to let it burn out while monitoring both water run-off and air quality.

<https://www.ctvnews.ca/kitchener/article/brantford-fire-still-investigating-storage-unit-battery-fire/>

September 2023, Valley Center, California: A fire erupted inside a battery storage container at the Valley Center Energy Storage Facility, leading to evacuations and shelter-in-place orders for nearby residents. This incident emphasized the risks of thermal runaway in lithium-ion batteries.

<https://www.nbcsandiego.com/news/local/valley-center-solar-battery-storage-catches-fire-evacuations-issued/3308882/>

July 2021, Geelong, Australia: During initial testing, a fire broke out in one of the Tesla Megapack modules at the Victorian Big Battery site. The fire took three days to extinguish, highlighting the challenges in controlling lithium-ion battery fires.

<https://www.abc.net.au/news/2021-09-28/fire-at-tesla-giant-battery-project-near-geelong-investigation/100496688>

All these incidents demonstrate the inherent risks of thermal runaway, fires, and explosions associated with lithium-ion batteries. These fires are impossible to extinguish, presenting a great risk to nearby homes. During the summer in particular, a fire at this facility could easily spread, affecting homes far beyond the immediate area. A fire would also release toxic gas/chemicals that have serious and long term effects on local wildlife and residents. It would make the general area uninhabitable for generations.

Given our rural settings, our TRI community emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders. It would put a strain on our local resources, as our local fire fighting resources are already strained.

## ENVIRONMENTAL CONCERNS

With respect to Environmental Concerns, the impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental damage. Our Townships pristine natural environment could face similar threats, with potential contamination of our air, soil, and watershed resources. The proposed location for the Battery Storage Facility is within the Magnetawan River Watershed, as defined by the Ontario Watershed Information Tool. This mapping service shows there are two Magnetawan River tributaries.

The release of toxic chemicals in the battery will become airborne in the event of a fire, posing a great risk to the health of local residents, flora and fauna. Our area has seen our air quality deteriorate from wildfires in neighbouring provinces, provincial parks, never mind a chemical fire in our own townships.

In their Hazard Mitigation Analysis <https://irp.cdn-website.com/20e551fd/files/uploaded/9. Hazard Mitigation Analysis-45c2e3d1.pdf>

*"Toxic and highly toxic gases released during fires and other fault conditions will not reach concentrations in excess of the IDLH level in the building or adjacent means of egress routes during the time deemed necessary*

to evacuate occupants from that area." .... "Given the Project 903 BESS is installed outdoors, where any gas release would be diluted by the entrainment of outside air, these gases, at the quantities measured during UL 9540A module level fire testing, would not be expected to have an adverse effect on individuals during the time deemed necessary to evacuate from the area (i.e., approximately 30 seconds to walk 100 ft away/evacuate from a burning EVLO BESS)"

Keep in mind, these fires won't be burning for 30 seconds, they will be burning for hours or days on end. Sure, we can be evacuated, but the toxic gases released into our environment, soils and watershed will have dire consequences.

## COMMUNITY IMPACT

With respect to Community Impact, the presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township and our surrounding Townships. We value our communities for their tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In the event of a fire, the impact may be much farther reaching should the fire impact our waterways or ignite a wildfire. Many local businesses rely on tourism to keep their businesses afloat. Any pollution could have dire consequences for our local economy, our great outdoors, especially those reliant on a healthy ecosystem. This includes fishing and hunting outfits, short term rentals, outdoor activities, businesses along the main streets of our small towns and many, many more.

## BENEFITS

Are there any benefits to this BESS system? The company who has proposed the storage facility has committed to monitoring the facility remotely via cameras. This means there will be minimal local employment opportunities (aside from the initial setup/construction potential) and a singular landowner reaping the vast majority of the benefits. No value from the additional saved energy is being put back into the surrounding townships!

This storage facility is set to close in 2047 but the company has only set aside \$60,000 to remediate the property. Even in today's market, this is substantially under bid. The greater risk is that this company will no longer exist in 20+ years and they won't be liable for the remediation plan.

That's a lot of Risk for little to no Benefit to all of us!

For all these reasons, I urge the council to consider not approving the application for the proposed BESS system in Armour Township.

I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment. There are other cleaner, safer solutions.

Thank you.

Ana & Dino Cultraro

Peggs Mountain Rd - Township of Ryerson

## Charlene Watt (Deputy Clerk)

---

**From:** Sandra Anderson  
**Sent:** March 7, 2025 4:49 PM  
**To:** Charlene Watt (Deputy Clerk)  
**Subject:** Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear Charlene Watt, Deputy Clerk

I am writing to express my strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years.

Notably:

- Moss Landing, California (January 2025): A massive fire at one of the world's largest battery storage facilities led to the evacuation of approximately 1,500 residents due to toxic smoke. The incident highlighted the challenges in managing lithium-ion battery fires, which can emit harmful gases and are difficult to extinguish.
- Hwaseong, South Korea (June 2024): An explosion and subsequent fire at a lithium battery factory resulted in 23 fatalities and eight injuries, underscoring the potential dangers associated with such facilities.
- Valley Center, California (September 2023): A fire erupted inside a battery storage container at the Valley Center Energy Storage Facility, leading to evacuations and shelter-in-place orders for nearby residents. This incident emphasized the risks of thermal runaway in lithium-ion batteries.
- Geelong, Australia (July 2021): During initial testing, a fire broke out in one of the Tesla Megapack modules at the Victorian Big Battery site. The fire took three days to extinguish, highlighting the challenges in controlling lithium-ion battery fires.

These incidents demonstrate the inherent risks of thermal runaway, fires, and explosions associated with lithium-ion batteries. Given Armour Township's rural setting, our emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders.

**Environmental Concerns:** The environmental impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental damage. Armour Township's pristine natural environment could face similar threats, with potential contamination of our air, soil, and water resources.

**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township. Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In light of these concerns, I urge the council to reject the proposal for the BESS in Armour Township. I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,  
Sandra Anderson  
Katrine Road  
Burk's Falls, Ont.

## Charlene Watt (Deputy Clerk)

---

**From:** Cari Bradley  
**Sent:** March 7, 2025 5:52 PM  
**To:** Armour Township Clerk  
**Subject:** Proposed Lithium Battery Storage Facility

Dear Charlene Watt,

I am writing this email to express my strong opposition to the proposed Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being and if you were not aware, have been associated with several hazardous incidents in recent years. There have been very recent massive fires requiring evacuation of residents in that area due to toxic smoke, some have resulted in casualties and serious injuries. In addition to that, regardless of how much training firefighters have, lithium battery fires are very difficult and, in some cases, nearly impossible to extinguish.

Apart from these risks I have just explained, the potential impact on the environment from lithium battery fires is profound. Toxic chemicals get released into our air and nearby waterways and I will add that the Magnetawan River is less than 2kms away from the property that will potentially house the storage facility. This could be detrimental to our pristine natural environment. This is not a risk worth taking!

Residents in Armour Township value our community for its tranquility and natural beauty. Another important point to consider with the introduction of such a facility is that this facility could decrease property values and if this proposed lithium storage facility is such an asset to our community, why would property values go down then? Perhaps because people understand the risks living in its vicinity.

In light of these serious concerns, I urge the council to reject the proposal for the BESS in Armour Township. I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,  
Cari Bradley

## Charlene Watt (Deputy Clerk)

---

**From:** Ashley Awan  
**Sent:** March 7, 2025 3:03 PM  
**To:** Armour Township Clerk  
**Subject:** BESS Proposal

To whom it may concern;

I am writing to formally express my opposition over the proposed BESS facility in Armour Township.

As a resident in a nearby township (living less than 12km from the proposed site), I am extremely worried for the safety and well-being of my young family and my community.

The following are some of my main concerns:

**Structure Fire** - Lithium battery fires are impossible to extinguish, presenting a great risk to nearby homes. During the summer in particular, a fire at this facility could easily spread affecting homes far beyond the immediate area. A fire would also release chemicals that have serious and long term effects on local wildlife and residents. It would make the general area uninhabitable for generations.

**Strain on Local Resources** - Lithium battery fires cannot be put out. They must burn until they extinguish. Our local fire fighting resources are already strained. This storage facility would require our local firefighters to gain additional training and equipment and would be a very dangerous fire to fight.

**Water Contamination** - The proposed location for the Battery Storage Facility is within the Magnetawan River Watershed, as defined by the Ontario Watershed Information Tool. This mapping service shows there is water on the property that connects to the Magnetawan River Waterway.

**Air Pollutants** - The chemicals in the battery will become airborne in the event of a fire, posing a great risk to the health of local residents, flora and fauna. Our area has seen our air quality deteriorate from wildfires in neighbouring provinces, nevermind a chemical fire in our own township.

**Diminished Property Values** - The multitude of risks this storage facility carries has a great impact on the property values of the surrounding homes. In the event of a fire, the impact may be much farther reaching should the fire impact our waterways or ignite a wildfire.

**Minimal Economic Benefit** - The company who has proposed the storage facility has committed to monitoring the facility remotely via cameras. This means there will be minimal local employment opportunities, apart from a singular landowner reaping the vast majority of the benefits.

**Risk to Local Businesses** - Many local businesses rely on tourism to keep their businesses afloat. Any pollution could have dire consequences for our local economy, especially those reliant on a healthy ecosystem. This includes fishing

and hunting outfits, short term rentals, the businesses along the main streets of our small towns and many, many more.

Inadequate Remediation Plan - This storage facility is set to close in 2047 but the company has only set aside \$50,000 to remediate the property. Even in today's market, this is substantially under bid. We also run the even greater risk that this company will no longer exist in 20+ years and they won't be liable for the remediation plan.

While I recognize the importance of renewable energy solutions and the role that energy storage can play in modernizing our grid, I believe that this facility poses significant concerns that cannot be overlooked. I believe that alternative locations or methods for energy storage and renewable energy development should be considered; ones that do not negatively impact our environment, safety, and community well-being.

I urge you to reconsider this proposal and explore other options that can meet our energy needs without compromising the values and integrity of our community.

Thank you for your attention to this matter. I look forward to hearing your thoughts and hope for a solution that is in the best interest of all involved.

Regards,  
Ashley Awan  
Township of Perry

RECEIVED

MAR 04 2025

TOWNSHIP OF ARMOUR

- **Subject:** Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear *Armour Township Councillors and Staff*

I am writing to express my strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years. Notably:

- Moss Landing, California (January 2025): A massive fire at one of the world's largest battery storage facilities led to the evacuation of approximately 1,500 residents due to toxic smoke. The incident highlighted the challenges in managing lithium-ion battery fires, which can emit harmful gases and are difficult to extinguish.
- Hwaseong, South Korea (June 2024): An explosion and subsequent fire at a lithium battery factory resulted in 23 fatalities and eight injuries, underscoring the potential dangers associated with such facilities.
- Valley Center, California (September 2023): A fire erupted inside a battery storage container at the Valley Center Energy Storage Facility, leading to evacuations and shelter-in-place orders for nearby residents. This incident emphasized the risks of thermal runaway in lithium-ion batteries.
- Geelong, Australia (July 2021): During initial testing, a fire broke out in one of the Tesla Megapack modules at the Victorian Big Battery site. The fire took three days to extinguish, highlighting the challenges in controlling lithium-ion battery fires.

These incidents demonstrate the inherent risks of thermal runaway, fires, and explosions associated with lithium-ion batteries. Given Armour Township's rural setting, our emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders.

**Environmental Concerns:** The environmental impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental

damage. Armour Township's pristine natural environment could face similar threats, with potential contamination of our air, soil, and water resources.

**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township. Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In light of these concerns, I urge the council to reject the proposal for the BESS in Armour Township.

I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter

T. L. Cowan

Millies Way  
Burks Falls, ON, P0A 1C0

March 2, 2025

**DELIVERED BY EMAIL:** [clerk@armourtownship.ca](mailto:clerk@armourtownship.ca) and [rward@armourtownship.ca](mailto:rward@armourtownship.ca)

Township of Armour  
56 Ontario Street  
PO Box 533  
Burk's Falls, ON P0A 1C0

**Attention: Charlene Watt, Clerk and Rod Ward, Mayor of Armour Township**

Dear Clerk Watt and Mayor Ward,

**RE: Letter of Opposition: Application for the Installation of a Lithium Battery Storage System for Concession 6, Part Lot 3**

This is my 2<sup>nd</sup> letter I am submitting on behalf of my family who owns property immediately east of and shares the property line with the above-noted Concession and Lot. For your reference, I have attached my 1<sup>st</sup> letter to the Township dated January 26, 2025, to this letter as Appendix "A".

My mother has received a letter from the Township of Armour, dated February 18, 2025, wherein it states to make oral or written submissions before the Township Council considers the Official Plan Amendment and Zoning By-Law Amendment. Please consider this letter as our official letter of opposition.

As adjacent property owners, my family has serious concerns about the Application submitted by the Company, SolarBank, and we are in strong opposition of this facility being built.

**Additional Concerns on behalf of my Family, since my 1<sup>st</sup> letter to your office:**

- My mother's ability to renew her property insurance with this potentially dangerous facility next door. Not only adjacent property owners will face this additional challenge, but the whole neighbourhood will also be affected. Also, should my mom have to make a claim to an insurance company from damage caused by the facility next door she would likely be denied any compensation. This is unfair to my mother who has the right and choice to purchase property insurance.
- Property Values will certainly decrease with these industrial installations in the area, including the already existing solar panels.
- With an installation such as this, with the potential of being so dangerous, why are the community members the last ones to be consulted when we should be the first ones consulted. Community safety should be the main concern of Armour Township.

- **No notice** was given to adjacent property owners in 2022, by SolarBank, of the public meeting that took place at the Katrine Community Centre on November 2, 2022. This Company is not following proper procedures. We knew nothing about the public meeting in November, 2022. I emailed SolarBank on February 4, 2025 asking for an explanation as to why they did not provide notice to adjacent property owners in 2022. I have sent follow up emails to this Company throughout the month of February, 2025, and I am still waiting to hear back from SolarBank.

I have also learned that SolarBank submitted an Application to the Town of Gravenhurst in 2023 and later withdrew it due to community outcry.

I have emailed Scott Aitchison, our local MPP, to make him aware of this Application that has been proposed for a residential area and asked him to take a lead role in opposing this Application.

Please see the links below, these are more examples of lithium batteries at storage locations catching fire because they run so hot (thermal runaway):

[Fire at battery plant in Moss Landing, California, forces evacuations | AP News](#)

[Brantford Fire still investigating storage unit battery fire](#)

Please also see the links below, where communities have removed support for BESS and where applications have been withdrawn over community concern:

[Gravenhurst resident decries spot for energy storage system](#)

<https://www.ctvnews.ca/ottawa/article/proposed-battery-storage-site-in-ottawas-west-end-raises-safety-concerns-from-residents/>

<https://www.guelphtoday.com/wellington-county/concerns-raised-over-proposed-fergus-battery-energy-storage-system-9860004>

[Council removes support for BESS in Official Plan amendment - Picton Gazette | The Picton Gazette](#)

#### **Additional Concerns at the Proposed Site:**

- **Regular blasting at Fowler's gravel pit/quarry situated across the road from this proposed site, the tremors we feel on blast days will also be felt at the property next door.**
- Risk of fire/explosion and environmental damage. Our volunteer fire department is not equipped for an environmental disaster and would need special training and special equipment to deal with battery fires. I have also read that these fires need to be left alone

to burn out and that they can burn for several days or weeks. What toxic chemicals are in these black clouds of smoke while these fires are burning out?

- Chemicals from batteries leaching into the ground and water source. There is a dug well at each property in the area. Who cleans up chemicals from an environmental disaster? Where do we get our clean water from after our wells are contaminated?
- In the event of a fire/explosion, a large-scale evacuation would have to be done of the area. The first responders in our small community are not equipped to facilitate such a large evacuation.
- Is the Township expecting us to live on pins and needles every day, wondering when we will be required to evaluate and possibly lose our home and entire property, depending on which direction the wind is blowing that day. If not, my family losing everything, then it will be one of the other adjacent property owners.
- When the three solar farms were installed in the Burk's Falls area (and in Armour Township, specifically), despite community outcry, the community and the adjacent property owners had absolutely no say in the matter, the Province of Ontario just rubber stamped "approved" on all three solar farms that were developed.

Besides the infrastructure already being in place because of the solar panels on this property, it makes ZERO sense to me to put this facility in a residential neighbourhood, an area that is surrounded by beautiful forest and a great deal of wildlife. There must be an industrial area somewhere in Ontario where this facility could be built, that also has infrastructure in place with connections to the power grid.

**Armour Township needs to put the safety and well being of their residents first and foremost, these are the people paying property taxes, make the safety of the people in this community a priority, rather than an afterthought.**

Sincerely,

*Alice Hewitt*

Signed on behalf of both Elizabeth Hewitt and Alice Hewitt  
... Pegg's Mountain Road, Burk's Falls, ON POA 1C0

cc: Joe Readman, Fire Chief, Township of Armour/Ryerson (fire@ryersontownship.ca)

cc: George Sterling, Mayor of Ryerson Township (mayor@ryersontownship.ca)

cc: Scott Aitchison, MPP (Scott.Aitchison@parl.gc.ca)

# **APPENDIX “A”**

January 26, 2025

**DELIVERED BY EMAIL:** [deputyclerk@armourtownship.ca](mailto:deputyclerk@armourtownship.ca)

Township of Armour  
56 Ontario Street  
PO Box 533  
Burk's Falls, ON P0A 1C0

**Attention: Charlene Watt, Deputy Clerk**

Dear Deputy Clerk Watt,

**RE: Application for the Installation of a Lithium Battery Storage System for Concession 6, Part Lot 3**

I am writing this letter on behalf of my family who owns property immediately east of and shares the property line with the above-noted Concession and Lot.

Our family farm has been in the Hewitt name for the past 90 years. We love our property, and we know for certain, many of our neighbours also love living on Pegg's Mountain Road. We cannot quietly sit back anymore and watch our neighborhood be destroyed. We have serious concerns about the Application submitted by the Company, SolarBank. I have also read the Minutes from the meeting held in Katrine on November 2, 2022, and have learned that this proposed storage system is not storing energy from the solar panels already installed on this property, that it is actually storing energy off the main power grid. It appears to me that this is a convenient opportunity for the property owner to benefit from more passive income. Our concerns are outlined below.

#### **Environmental Impact and Safety of the Neighbourhood**

- What responsibilities does this property owner have to ensure the safe operation of this storage system and to ensure no harm will come to any neighbours and their properties?
- Does this storage facility give off noise?
- Does this storage system give off gasses and/or chemicals? Has research been done to determine if the gasses etc., are cancer causing?
- Do the other solar farms in the Burk's Falls area already have these storage systems in place?

## **Safety of the Storage System**

We have serious concerns about leakage, fire and explosion from this storage system and the leakage of chemicals into the ground and water sources. We have a dug well and plant a vegetable garden every summer. If our property becomes contaminated, who is responsible for providing us with clean water and healthy ground for the vegetable harvest. Would we simply receive an email from SolarBank saying "so sorry for your loss"?

We also have a lot of wildlife that call our neighbourhood home too. We see deer, moose, fox, rabbits, turkeys, just to name a few, on a regular basis. If the streams and ponds in the area were to become contaminated, then our wildlife would surely die.

## **Responsibilities of SolarBank and Liability for Damage to Property**

- Is SolarBank committed to providing emergency training to first responders in Burk's Falls, being the fire department, paramedics and police, in the event of a fire and/or explosion at this battery storage system?

We are very concerned that our Village Fire Department, which consists largely of volunteer fire fighters, is not equipped to deal with a major environmental catastrophe, which seems entirely possible with this type of battery storage system, given the news reports I am reading about this technology.

- Is SolarBank committed to paying the neighbours for loss and damage to property from a fire and/or explosion at this storage system?

We have researched this type of storage system and have learned that in the event of a fire and/or explosion, that the neighbourhood would have to be evacuated within a 20-mile radius, and that a fire of this nature can burn for days.

News Articles: [Emerging Hazards of Battery Energy Storage System Fires | FEMA.gov](#)  
[Fire burns for five days at huge lithium-ion energy storage facility | Recharge](#)  
['Close call' fire in Huntsville Ont. prevented](#)

I cannot image that the Township of Armour would agree to have such a facility built given that the Township must be aware of the high risk associated with environmental disaster, the potential for property damage and the potential for loss of life.

- Is SolarBank committed to performing regular inspections of this storage system? How often are these inspections going to take place? Is SolarBank going to report back to the Township Office each and every time they have conducted a successful safety inspection of this facility? Our research shows that a facility like this needs to be monitored

constantly for temperature, that the storage system needs to be kept within a certain temperature range and if one unit catches fire, it's a chain reaction.

#### News Article: Fire Inspection Requirements for Battery Energy Storage Systems - Hiller Fire

- When these batteries explode, what type of chemicals are released, are these chemicals then seeping into the ground and water supply?
- Are building codes and safety codes going to be followed when building this facility to ensure measures are in place in the event of a fire and/or explosion?
- These batteries will be located outdoors, how do they react to our cold winter temperatures? News Articles show that fires are more common in the cold temperatures with these batteries.

News Articles:

#### Understanding the Risks of Fire in Battery Storages - MoviTHERM

#### Lithium-ion batteries: Mitigating the risks around their use and storage - QBE Canada

Effect of low temperature on thermal runaway and fire behaviors of 18650 lithium-ion battery: A comprehensive experimental study - ScienceDirect [this article confirms that studies at low temperatures with these batteries are quite limited]

- If this type of storage facility is not storing energy from the solar panels already installed at this particular property, then our suggestion is that the company choose a location for its battery storage facility that is farther away from a populated community. Wouldn't an industrial area be more appropriate for this type of facility?
- Will our electricity next door to this facility, be affected, such as brown outs or black outs?

#### **In Conclusion**

I sincerely hope the Township of Armour research this type of storage system before approving this application and I strongly encourage the Township to consider a different location for such a facility, perhaps a less populated location.

I have read the reports provided by SolarBank, that have been posted to the Township's website and let's face it, a large corporation that operates globally can put whatever they want in their reports in an effort to appease us.

Also, if this facility is built and considered a success by SolarBank, then what does the future hold for the Burk's Falls area, battery storage facilities in every vacant field?

I look forward to attending the next meeting at the Township Office regarding this Application and I also hope that a representative from SolarBank attends this next meeting, as I will insist on an answer to each and every question set out in this letter.

I also hope that a representative from each of our first responders is present at this next meeting, it is vitally important that the police, fire department and paramedics are fully aware of what they are potentially dealing with in their community.

And finally, it saddens me a great deal to see our rural communities and our beautiful farm properties being severed for more housing and also leased out to these large companies and driven by one factor only, greed.

Sincerely,

*Alice Hewitt*

Signed for both Elizabeth Hewitt and Alice Hewitt  
Pegg's Mountain Road, Burk's Falls, ON P0A 1C0

## Charlene Watt (Deputy Clerk)

---

**From:** Liz Hewitt  
**Sent:** March 2, 2025 5:07 PM  
**To:** Charlene Watt (Deputy Clerk); Mayor Rod Ward  
**Subject:** BESS -Battery Storage Facility - 219 Pegg's Mountain Road - Email in Opposition

Good afternoon Deputy-Clerk Watt and Mayor Ward,

This is my personal letter of opposition to the proposed battery facility next door to my property on Pegg's Mountain Road. I know my daughters have all expressed their deep concern over this situation. I am very proud of them to have stood up and dared to be heard.

The Hewitt family has owned and paid taxes to Armour Township for 90 years, on this 100 acres. I have lived here myself for 60 of those years. This is our home and we love it. This has been a beautiful rural area where the farming community took pride in caring for their land and their animals, and as neighbours we had respect for each other.

I am concerned that I may have issues renewing my property insurance with a possibly dangerous facility next door. Should I ever have a claim based on damage done to my property from the facility next door, I may be denied compensation.

Another concern I have are property values. With industrial facilities next door, I doubt very much that I would be able to sell my property at market value, should I want to do that one day.

This situation is extremely unfair and the taxpayers of Armour Township deserve better than this.

With an installation such as this one, having the potential to be extremely dangerous to the neighbourhood and the whole community, why is the taxpayer's opposition relegated to the bottom of the list in consideration?

This whole thing should have gone before the people in the first place, rather than being treated as an after-thought. We love the beauty of nature here, the fresh air and water, the wildlife which continue to roam through here and the ability to grow our own vegetables. God created our beautiful countryside and simply asked us to "tend it and care for it". Mankind, instead creates pollution !

Please consider very carefully our homes, our families and our safety.

Regards,  
Elizabeth Hewitt

## Charlene Watt (Deputy Clerk)

---

**From:** Grace McCoy  
**Sent:** March 2, 2025 6:15 PM  
**To:** Charlene Watt (Deputy Clerk)  
**Cc:** Armour Township Clerk  
**Subject:** 219 Peggs Mountain Road

Hello Charlene, I am writing in response to the notice letter that went out last week to adjacent property owners.

I am opposed to the amendments of the official plan ( OPA 2025-01) and the zoning bylaw amendment as well (ZBA 2025-01).

I want this letter to be my written submission so I am not left out if the time comes that we proceed with an appeal to the Ontario Land Tribunal.

I am also drafting another letter of opposition to be added into your file.

Thank you,

Grace McCoy.

[Get Outlook for Android](#)

## Charlene Watt (Deputy Clerk)

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**From:** Ana Cultraro  
**Sent:** February 27, 2025 4:12 PM  
**To:** Mayor Rod Ward; Councillor Jerry Brandt; Councillor Wendy Whitwell; Councillor Rod Blakelock; Councillor Dorothy Haggart-Davis; Armour Township Clerk; Dave Gray  
**Subject:** Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear Armour Township Mayor and Councillors

I am writing to express my strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years. Notably:

- Moss Landing, California (January 2025): A massive fire at one of the world's largest battery storage facilities led to the evacuation of approximately 1,500 residents due to toxic smoke. The incident highlighted the challenges in managing lithium-ion battery fires, which can emit harmful gases and are difficult to extinguish.
- Brantford ON (September 2024): A fire at Aypa Power Canada's storage facility saw flames contained to one unit and thankfully no injuries. The cause is still being investigated. According to a spokesperson for the Ministry of Environment, firewater runoff from the site impacted a retention pond as well as a nearby creek. The Fire Chief said the protocol for dealing with such a battery fire is to let it burn out while monitoring both water run-off and air quality. This incident highlights the challenges of putting out these fires.
- Valley Center, California (September 2023): A fire erupted inside a battery storage container at the Valley Center Energy Storage Facility, leading to evacuations and shelter-in-place orders for nearby residents. This incident emphasized the risks of thermal runaway in lithium-ion batteries.
- Geelong, Australia (July 2021): During initial testing, a fire broke out in one of the Tesla Megapack modules at the Victorian Big Battery site. The fire took three days to extinguish, highlighting the challenges in controlling lithium-ion battery fires.

These incidents demonstrate the inherent risks of thermal runaway, fires, and explosions associated with lithium-ion batteries. Given Armour Township's rural setting and our neighbouring townships as well, our emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders.

**Environmental Concerns:** The environmental impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental damage. Armour Township and Ryerson Township have pristine natural environments that could face similar threats, with potential contamination of our air, soil, and water resources. **The proposed location for the Battery Storage Facility is within the Magnetawan River Watershed, as defined by the Ontario Watershed Information Tool. This mapping service shows there are two Magnetawan River tributaries.**

**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of

Armour and Ryerson Township Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In light of these concerns, I urge the council to reject the proposal for the BESS in Armour Township. This will impact not only Armour Township but all our neighbouring communities.

I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,  
Ana & Dino Cultraro  
Peggs Mountain Rd, Ryerson Township

## Charlene Watt (Deputy Clerk)

---

**From:** Natasha Gocool <Natasha.Gocool@oeb.ca>  
**Sent:** February 19, 2025 3:36 PM  
**To:** Charlene Watt (Deputy Clerk)  
**Subject:** FW: Township of Armour: Notice of Complete Application OPA & ZBA- Lithium Battery Energy Storage System (BESS)  
**Attachments:** Notice of Complete Application - Circulation 02182025.pdf; 2. BESS Site Plan.pdf  
**Importance:** High

Good Afternoon Ms. Watt,

Thank you for submitting the Notice of Complete Application and a copy of the BESS Site plan.

Please note, section 57 of the *Ontario Energy Board Act, 1998* (OEB Act) requires entities to hold an electricity storage licence.

An electricity storage licence enables the licensee to generate electricity or provide ancillary services for sale through the IESO-administered markets or directly to another person; purchase electricity or ancillary services in the IESO-administered markets or directly from a generator; and sell electricity or ancillary services through the IESO-administered markets or directly to another person, other than a consumer.

There are certain exemptions from the requirement to hold an electricity storage licence. One of those exemptions is that a person who owns or operates one or more facilities each with a total name plate capacity of 500 kilowatts or less is exempt from the need to obtain an electricity storage licence.

SolarBank Corporation would be required (as per the above) to be licensed to own and operate the BESS storage facility, as described in the attached documents.

I'm not sure if you or SolarBank Corporation is aware of the licence requirements, but I am providing it to you.

For more information, please visit the [OEB's licence webpage](#).

If you have any questions, please let me know.

Thanks,

Natasha Gocool, Advisor, Transmission Policy & Compliance, Consumer Protection & Industry Performance  
2300 Yonge Street, 27<sup>th</sup> Floor, Toronto ON M4P 1E4 | [OEB.ca](#)



**From:** Charlene Watt (Deputy Clerk) <[deputyclerk@armourtownship.ca](mailto:deputyclerk@armourtownship.ca)>  
**Sent:** Wednesday, February 19, 2025 1:40 PM

## Charlene Watt (Deputy Clerk)

---

**From:** Mayor Rod Ward  
**Sent:** February 19, 2025 2:32 PM  
**To:** Ana Cultraro; Councillor Jerry Brandt; Councillor Wendy Whitwell; Councillor Rod Blakelock; Councillor Dorothy Haggart-Davis  
**Cc:** Armour Township Clerk; Dave Gray  
**Subject:** RE: Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Apologies, forgot to add Charlene and Dave from Armour staff.

*Rod Ward*  
Mayor – Township of Armour  
PO Box 533, 56 Ontario Street  
Burk's Falls, Ontario P0A 1C0  
Office: 705-382-3332...  
Direct: 705-380-7654 (cell) or 705-380-7177 (home)  
Email: [rward@armourtownship.ca](mailto:rward@armourtownship.ca)  
Website: [www.armourtownship.ca](http://www.armourtownship.ca)

**From:** Mayor Rod Ward  
**Sent:** February 19, 2025 2:30 PM  
**To:** Ana Cultraro; Councillor Jerry Brandt <jbrandt@armourtownship.ca>; Councillor Wendy Whitwell <wwhitwell@armourtownship.ca>; Councillor Rod Blakelock <rblakelock@armourtownship.ca>; Councillor Dorothy Haggart-Davis <dhaggart\_davis@armourtownship.ca>  
**Subject:** RE: Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Good day, Ana...

Thank you for your letter of concern regarding the BESS application. All concerns will be brought forward at the public meeting when this item is discussed in front of Council. As per our process for all Planning applications of this sort, we will review their application in detail and we will take all input for the application, whether in-favour or against, into consideration. Armour Council in its entirety will review the application, as well as any letters of concern, any feedback from the proponent, any information from peer reviews (which will be done to help us assess the applicant's information), and any pertinent information from folks such as the Fire Department.

Our Clerk, Charlene, (copied here) is collecting all of these emails, letters of concern, etc. so all of Council has a chance to review.

Rod

*Rod Ward*  
Mayor – Township of Armour  
PO Box 533, 56 Ontario Street  
Burk's Falls, Ontario P0A 1C0  
Office: 705-382-3332...  
Direct: 705-380-7654 (cell) or 705-380-7177 (home)  
Email: [rward@armourtownship.ca](mailto:rward@armourtownship.ca)  
Website: [www.armourtownship.ca](http://www.armourtownship.ca)

**From:** Ana Cultraro  
**Sent:** February 19, 2025 11:19 AM  
**To:** Mayor Rod Ward <[rward@armourtownship.ca](mailto:rward@armourtownship.ca)>; Councillor Jerry Brandt <[jbrandt@armourtownship.ca](mailto:jbrandt@armourtownship.ca)>; Councillor Wendy Whitwell <[wwhitwell@armourtownship.ca](mailto:wwhitwell@armourtownship.ca)>; Councillor Rod Blakelock <[rblakelock@armourtownship.ca](mailto:rblakelock@armourtownship.ca)>; Councillor Dorothy Haggart-Davis <[dhaggart\\_davis@armourtownship.ca](mailto:dhaggart_davis@armourtownship.ca)>  
**Cc:** Ana Cultraro <[ana.froggie@gmail.com](mailto:ana.froggie@gmail.com)>  
**Subject:** Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear Armour Township Council

I am writing to express my strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

Although I'm not a resident of Armour Township, I am a concerned resident of neighbouring Ryerson township who will suffer the same risks due to our proximity.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years.

Notably:

- Moss Landing, California (January 2025): A massive fire at one of the world's largest battery storage facilities led to the evacuation of approximately 1,500 residents due to toxic smoke. The incident highlighted the challenges in managing lithium-ion battery fires, which can emit harmful gases and are difficult to extinguish.
- Hwaseong, South Korea (June 2024): An explosion and subsequent fire at a lithium battery factory resulted in 23 fatalities and eight injuries, underscoring the potential dangers associated with such facilities.
- Valley Center, California (September 2023): A fire erupted inside a battery storage container at the Valley Center Energy Storage Facility, leading to evacuations and shelter-in-place orders for nearby residents. This incident emphasized the risks of thermal runaway in lithium-ion batteries.
- Geelong, Australia (July 2021): During initial testing, a fire broke out in one of the Tesla Megapack modules at the Victorian Big Battery site. The fire took three days to extinguish, highlighting the challenges in controlling lithium-ion battery fires.

These incidents demonstrate the inherent risks of thermal runaway, fires, and explosions associated with lithium-ion batteries. Given Armour Township's rural setting and neighbouring township, our TRI community emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders.

**Environmental Concerns:** The environmental impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental damage. Armour Township's as well as Ryerson's pristine natural environment could face similar threats, with potential contamination of our air, soil, and water resources.

**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township, and ours should it ever be decided to do the same in Ryerson township. Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In light of these concerns, I urge the council to help our neighbour township and reject the proposal for the BESS in Armour Township.

I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,

Ana Cultraro  
Peggs Mountain Rd  
Ryerson, ON  
P0A1C0

## Charlene Watt (Deputy Clerk)

---

**From:** Mayor Rod Ward  
**Sent:** February 15, 2025 6:19 AM  
**To:** Cari Bradley  
**Cc:** Dave Gray; Armour Township Clerk  
**Subject:** RE: Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Good day, Cari...

Thank you for your letter of concern regarding the BESS application. All concerns will be brought forward at the public meeting when this item is discussed in front of Council. As per our process for all Planning applications of this sort, we will review their application in detail and we will take all input for the application, whether in-favour or against, into consideration. Armour Council in its entirety will review the application, any letters of concern, any feedback from the proponent, any information from peer reviews (which will be done to help us assess the applicant's information), and any pertinent information from folks such as the Fire Department.

Our Clerk, Charlene, (copied here) is collecting all of these emails, letters of concern, etc. so all of Council has a chance to review.

Rod

*Rod Ward*  
Mayor – Township of Armour  
PO Box 533, 56 Ontario Street  
Burk's Falls, Ontario P0A 1C0  
Office: 705-382-3332...  
Direct: 705-380-7654 (cell) or 705-380-7177 (home)  
Email: [rward@armourtownship.ca](mailto:rward@armourtownship.ca)  
Website: [www.armourtownship.ca](http://www.armourtownship.ca)

**From:** Cari Bradley  
**Sent:** February 14, 2025 9:56 PM  
**To:** Mayor Rod Ward <[rward@armourtownship.ca](mailto:rward@armourtownship.ca)>  
**Subject:** Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear Mayor Rod Ward,

I am writing this email to express my strong opposition to the proposed Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being and if you were not aware, have been associated with several hazardous incidents in recent years. There have been very recent massive fires requiring evacuation of residents in that area due to toxic smoke, some have resulted in casualties and serious injuries. In addition to that, regardless of how much training firefighters have, lithium battery fires are very difficult and, in some cases, nearly impossible to extinguish.

Apart from these risks I have just explained, the potential impact on the environment from lithium battery fires is profound. Toxic chemicals get released into our air and nearby waterways and I will add that the Magnetawan River is less than 2kms away from the property that will potentially house the storage facility. This could be detrimental to our pristine natural environment. This is not a risk worth taking!

Residents in Armour Township value our community for its tranquility and natural beauty. Another important point to consider with the introduction of such a facility is that this facility could decrease property values and if this proposed lithium storage facility is such an asset to our community, why would property values go down then? Perhaps because people understand the risks living in its vicinity.

In light of these serious concerns, I urge the council to reject the proposal for the BESS in Armour Township. I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,  
Cari Bradley

## Charlene Watt (Deputy Clerk)

---

**From:** Laura Page  
**Sent:** February 14, 2025 9:29 AM  
**To:** Mayor Rod Ward; Charlene Watt (Deputy Clerk)  
**Subject:** Lithium Battery Facility

I'm very concerned about the Facility on Pegg's Mountain property. I live around the corner from it. We have concerns about how much of a Fire Risk it is. Our Fire Dept won't be able to contain it on their own. Unknown how many days it will burn and if it spreads into the bush. It will ruin the water ways & water tables. Also many houses could be destroyed and people's lives. Also if near by Fire Depts need to help it will leave Villages , Townships without protection possibly for days. Then if Evacuations are needed what's the plan for that. ? Who, What, Where , How Neighboring Municipal Offices should be be notified of this Facility. It affects everyone in the Almaguin Highlands. Please mail out this Complete Application for this Facility. There are lots of residents that don't know cause they don't have internet. Please take time to consider Fire Risks , Air, and Evacuations. And the damage this can do to our beautiful communities near & far.

Thanks  
Laura

Sent from my Bell Samsung device over Canada's largest network.

## Charlene Watt (Deputy Clerk)

---

**From:** Mayor Rod Ward  
**Sent:** February 13, 2025 11:27 AM  
**To:** Sandra Anderson  
**Cc:** Dave Gray; Armour Township Clerk  
**Subject:** RE: Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Thanks for your note of concern, Sandra...I have copied our CAO and Clerk for our files.

Rod

*Rod Ward*  
Mayor – Township of Armour  
PO Box 533, 56 Ontario Street  
Burk's Falls, Ontario P0A 1C0  
Office: 705-382-3332...  
Direct: 705-380-7654 (cell) or 705-380-7177 (home)  
Email: [rward@armourtownship.ca](mailto:rward@armourtownship.ca)  
Website: [www.armourtownship.ca](http://www.armourtownship.ca)

**From:** Sandra Anderson ·  
**Sent:** February 13, 2025 10:48 AM  
**To:** Mayor Rod Ward <[rward@armourtownship.ca](mailto:rward@armourtownship.ca)>  
**Subject:** Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear Rod Ward, Mayor

I am writing to express my strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years.

Notably:

- Moss Landing, California (January 2025): A massive fire at one of the world's largest battery storage facilities led to the evacuation of approximately 1,500 residents due to toxic smoke. The incident highlighted the challenges in managing lithium-ion battery fires, which can emit harmful gases and are difficult to extinguish.
- Hwaseong, South Korea (June 2024): An explosion and subsequent fire at a lithium battery factory resulted in 23 fatalities and eight injuries, underscoring the potential dangers associated with such facilities.
- Valley Center, California (September 2023): A fire erupted inside a battery storage container at the Valley Center Energy Storage Facility, leading to evacuations and shelter-in-place orders for nearby residents. This incident emphasized the risks of thermal runaway in lithium-ion batteries.

- Geelong, Australia (July 2021): During initial testing, a fire broke out in one of the Tesla Megapack modules at the Victorian Big Battery site. The fire took three days to extinguish, highlighting the challenges in controlling lithium-ion battery fires.

These incidents demonstrate the inherent risks of thermal runaway, fires, and explosions associated with lithium-ion batteries. Given Armour Township's rural setting, our emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders.

**Environmental Concerns:** The environmental impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental damage. Armour Township's pristine natural environment could face similar threats, with potential contamination of our air, soil, and water resources.

**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township. Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In light of these concerns, I urge the council to reject the proposal for the BESS in Armour Township. I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,  
Sandra Anderson  
Katrine Road  
Burk's Falls, Ont.

## Charlene Watt (Deputy Clerk)

---

**From:** Mayor Rod Ward  
**Sent:** February 13, 2025 9:19 AM  
**To:** Dave Gray; Armour Township Clerk  
**Subject:** FW: Opposition to Proposed Lithium Battery Storage Facility in Armour Township

FYI...second one I've seen with identical information to Scott and Graydon...and Great North Arrow...

*Rod Ward*  
Mayor – Township of Armour  
PO Box 533, 56 Ontario Street  
Burk's Falls, Ontario P0A 1C0  
Office: 705-382-3332...  
Direct: 705-380-7654 (cell) or 705-380-7177 (home)  
Email: [rward@armourtownship.ca](mailto:rward@armourtownship.ca)  
Website: [www.armourtownship.ca](http://www.armourtownship.ca)

**From:** Carolann Moore  
**Sent:** February 13, 2025 9:11 AM  
**To:** Aitchison, Scott - M.P. <[scott.aitchison@parl.gc.ca](mailto:scott.aitchison@parl.gc.ca)>; Greatnortharrow@gmail.com; Smith, Graydon <[graydon.smith@pc.ola.org](mailto:graydon.smith@pc.ola.org)>; Mayor Rod Ward <[rward@armourtownship.ca](mailto:rward@armourtownship.ca)>  
**Subject:** Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear  
Scott Aitchison, MP  
Graydon Smith, MPP  
Rod Ward, mayor  
Editor Great North arrow

I am writing to express my strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years.

Notably:

- Moss Landing, California (January 2025): A massive fire at one of the world's largest battery storage facilities led to the evacuation of approximately 1,500 residents due to toxic smoke. The incident highlighted the challenges in managing lithium-ion battery fires, which can emit harmful gases and are difficult to extinguish.
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These incidents demonstrate the inherent risks of thermal runaway, fires, and explosions associated with lithium-ion batteries. Given Armour Township's rural setting, our emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders.

**Environmental Concerns:** The environmental impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental damage. Armour Township's pristine natural environment could face similar threats, with potential contamination of our air, soil, and water resources.

**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township. Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In light of these concerns, I urge the council to reject the proposal for the BESS in Armour Township. I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,

Carolann Moore

ARMOUR RESIDENT

---

Sent from my Bell Samsung device over Canada's largest network.

## Charlene Watt (Deputy Clerk)

---

**From:** Mayor Rod Ward  
**Sent:** February 13, 2025 10:07 AM  
**To:** Dave Gray; Armour Township Clerk  
**Subject:** FW: Opposition to Proposed Lithium Battery Storage Facility in Armour Township

FYI

Mayor – Township of Armour  
PO Box 533, 56 Ontario Street  
Burk's Falls, Ontario P0A 1C0  
Office: 705-382-3332...  
Direct: 705-380-7654 (cell) or 705-380-7177 (home)  
Email: [rward@armourtownship.ca](mailto:rward@armourtownship.ca)  
Website: [www.armourtownship.ca](http://www.armourtownship.ca)

-----Original Message-----

From: Barbara MacPherson <[bmacpherson@armourtownship.ca](mailto:bmacpherson@armourtownship.ca)>  
Sent: February 13, 2025 9:47 AM  
To: Greatnortharrow@gmail.com; Scott.Aitchison@parl.gc.ca; graydon.smith@pc.ola.org; Mayor Rod Ward <[rward@armourtownship.ca](mailto:rward@armourtownship.ca)>  
Subject: Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear  
Scott Aitchison, MP  
Graydon Smith, MPP  
Rod Ward, mayor  
Editor Great North arrow

I am writing to express my strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years.

Notably:

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These incidents demonstrate the inherent risks of thermal runaway, fires, and explosions associated with lithium-ion batteries. Given Armour Township's rural setting, our emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders.

**Environmental Concerns:** The environmental impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental damage. Armour Township's pristine natural environment could face similar threats, with potential contamination of our air, soil, and water resources.

**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township. Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In light of these concerns, I urge the council to reject the proposal for the BESS in Armour Township. I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,

Barbara MacPherson

## Charlene Watt (Deputy Clerk)

---

**From:** Mayor Rod Ward  
**Sent:** February 13, 2025 10:07 AM  
**To:** Dave Gray; Armour Township Clerk  
**Subject:** FW: Opposition to Proposed Lithium Battery Storage Facility in Armour Township

fyi

*Redacted*  
Mayor – Township of Armour  
PO Box 533, 56 Ontario Street  
Burk's Falls, Ontario P0A 1C0  
Office: 705-382-3332...  
Direct: 705-380-7654 (cell) or 705-380-7177 (home)  
Email: [rward@armourtownship.ca](mailto:rward@armourtownship.ca)  
Website: [www.armourtownship.ca](http://www.armourtownship.ca)

**From:** Marie Odorizzi  
**Sent:** February 13, 2025 8:55 AM  
**To:** Greatnortharrow@gmail.com; Scott.Aitchison@parl.gc.ca; graydon.smith@pc.ola.org; Mayor Rod Ward <rward@armourtownship.ca>  
**Subject:** Opposition to Proposed Lithium Battery Storage Facility in Armour Township

Dear ,  
**Scott Aitchison, MP**  
**Graydon Smith, MPP**  
Rod Ward, Mayor  
Editor Great North arrow

I am writing to express my strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years.

Notably:

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**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township. Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy.

In light of these concerns, I urge the council to reject the proposal for the BESS in Armour Township. I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment.

Thank you for your attention to this critical matter.

Sincerely,

Marie Odorizzi  
Garage Rd, Armour Township

## Charlene Watt (Deputy Clerk)

---

**From:** Mayor Rod Ward  
**Sent:** February 14, 2025 5:43 AM  
**To:** John  
**Cc:** Dave Gray; Armour Township Clerk  
**Subject:** RE: Opposition to the Lithium Battery Storage Facility in Armour Township

Good day, Nancy and John...

Thank you for your letter of concern regarding the BESS application. All concerns will be brought forward at the public meeting when this item is discussed in front of Council. As per our process for all Planning applications of this sort, we will review their application in detail and we will take all input for the application, whether in-favour or against, into consideration. Armour Council in its entirety will review the application, any letters of concern, any feedback from the proponent, any information from peer reviews (which will be done to help us assess the applicant's information), and any pertinent information from folks such as the Fire Department.

Charlene (copied here) is collecting all of these emails, letters of concern, etc. so all of Council has a chance to review.

Rod

*Ron Ward*  
Mayor – Township of Armour  
PO Box 533, 56 Ontario Street  
Burk's Falls, Ontario P0A 1C0  
Office: 705-382-3332...  
Direct: 705-380-7654 (cell) or 705-380-7177 (home)  
Email: [rward@armourtownship.ca](mailto:rward@armourtownship.ca)  
Website: [www.armourtownship.ca](http://www.armourtownship.ca)

**From:** John  
**Sent:** February 13, 2025 12:00 PM  
**To:** Mayor Rod Ward <[rward@armourtownship.ca](mailto:rward@armourtownship.ca)>  
**Subject:** Opposition to the Lithium Battery Storage Facility in Armour Township

Dear Mayor Ron Ward,

As a small business owner in Ryerson Township where we live and operate our Property Management Company, with customers throughout the Almaguin Region, we care deeply about our lovely community and pristine wilderness as well as the people who reside here and vacation here. We are writing to you to express our strong opposition to the proposed 4.99 MW Battery Energy Storage System (BESS) in Armour Township. While I recognize the importance of advancing renewable energy solutions, the history of lithium battery storage facilities raises significant concerns regarding public safety, environmental impact, and community well-being.

**Public Safety Risks:** Lithium battery storage facilities have been associated with several hazardous incidents in recent years.

Notably:

- Moss Landing, California (January 2025): A massive fire at one of the world's largest battery storage facilities led to the evacuation of approximately 1,500 residents due to toxic smoke. The incident highlighted the challenges in managing lithium-ion battery fires, which can emit harmful gases and are difficult to extinguish.
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Given Armour Township's rural setting, our emergency response capabilities may be insufficient to effectively manage such emergencies, potentially endangering residents and first responders.

**Environmental Concerns:** The environmental impact of lithium battery fires is profound. The Moss Landing incident, for example, resulted in the release of toxic chemicals into the air and nearby waterways, causing significant environmental damage. Armour Township's pristine natural environment could face similar threats, with potential contamination of our air, soil, and water resources.

**Community Impact:** The presence of a large-scale industrial battery storage facility is incongruent with the character of Armour Township. Residents value our community for its tranquility and natural beauty. The introduction of such a facility could adversely affect property values and diminish the quality of life we currently enjoy. In light of these concerns, I urge the council to reject the proposal for the BESS in Armour Township. I advocate for the exploration of alternative energy solutions that do not carry the same level of risk to our community's safety and environment. Thank you for your attention to this critical matter.

Sincerely,  
Nancy and John  
South Horn Lake Road  
Burk's, Falls, On

**Nancy and John Punter**  
**Punter Property Management Services**  
Nancy  
John

## Charlene Watt (Deputy Clerk)

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**From:** Susan Hewitt  
**Sent:** January 27, 2025 11:07 PM  
**To:** Charlene Watt (Deputy Clerk)  
**Subject:** Letter of Concern Regarding Proposed Lithium-ion Battery Storage Facility

Good Evening Charlene,

I am writing in response to the proposed Lithium-ion battery storage facility @ 219 Pegg's Mountain Road.

Our family farm is located just next door to the East @ 219 Pegg's Mountain Road. I want to make it very clear that this is a letter of opposition to this project. Our farm has been in our family for MANY years. It has saddened me over the years when I come home to see another farm gone and the land being misused and mistreated. Especially when we are commanded in scripture to be good caretakers of what God has given us. This is not being good stewards at all.

I've been blessed over the past 40 years as a health care professional and when I look at the potential health implications of such a project going wrong or worse it is down right frightening to me.

This technology is fairly new and from the research I have done recently tells me there is still a lot of kinks to iron out. These lithium-ion batteries are very sensitive in nature. They have to be stored in a controlled environment at a certain temperature. (room temperature). When these batteries are abused or misused due to overcharging, over-discharging and physical damage then the release of gases occur. If the battery terminals come into direct contact it can short circuit, leading to a rapid discharge, and heat build-up which would result in an explosion.

To date all lithium-ion chemistries carry inherent flammable gassing risk. In the event of a fire/explosion it releases a cocktail of toxic gases-hydrogen fluoride when mixed with water forms hydrofluoric acid. It also releases other gases such as: hydrogen cyanide, hydrogen chloride, sulfur dioxide, fluorinated phosphorus and lithium based compounds. Asphyxiant gas and CO<sub>2</sub>. These gases will cause severe respiratory distress, skin burns, eye irritation, COPD, asthma, systemic poisoning, affecting multiple organs. The fluoride ions can disrupt cellular functions, leading to severe health issues over time. No one wants this!!!

These types of fires are by far the hardest to extinguish because you can't use water on them. You need a foam extinguisher, CO<sub>2</sub>, ABC dry chemical, Fire Blue, powdered graphite, copper powder, or sodium carbonate. The fire can burn for days and days. Then there is the big vapour cloud to deal with. I don't think Burk's Falls is prepared to deal with such an environmental disaster!! Has our local fire department had special training for such fires? Do they have what they need to extinguish such a fire? If there had to be a mass evacuation of people does the police, firefighters, and paramedics have a plan in place? And what would happen if the highway was closed due to mounds of snow? This is serious stuff and not to be taken lightly. There are lives at stake here and people's homes.

Articles for your Reading: 1) A Growing Safety Concern: Health Hazards of Lithium-ion Battery Fires. [www.cdnfirefighter.com](http://www.cdnfirefighter.com)

2) Fire not the only danger with Lithium-ion Batteries. [www.ttclub.com](http://www.ttclub.com)

In closing, we the Hewitt family, have a lot of heart and passion for the things we love and we love the farm. Home is where the heart is. It is a safe haven for us and will continue to be. The people, our neighbours, love living on Pegg's Mountain Road.

The people wanting this project to go through don't really care how it affects the people on Pegg's Mountain Road. Let me say this it is always personal to someone. It always is! We are asking Armour Township to do the right thing here and axe the location of this project on Pegg's Mountain Road, and find another location that is not populated.

We live in precarious times today. So many unknowns in our world. The last thing my 86 year old mother needs to be thinking about at night is if the battery storage building next door is going to blow up. You would feel the same way if you were in our shoes.

Let us not fall to greed and selfish ambition, but a better use of this land would be to put up greenhouses and grow food to help feed people in need, rather than destroy the land that God gave us.

Sincerely,  
Susan Hewitt

January 26, 2025

**DELIVERED BY EMAIL:** [deputyclerk@armourtownship.ca](mailto:deputyclerk@armourtownship.ca)

Township of Armour  
56 Ontario Street  
PO Box 533  
Burk's Falls, ON P0A 1C0

**Attention: Charlene Watt, Deputy Clerk**

Dear Deputy Clerk Watt,

**RE: Application for the Installation of a Lithium Battery Storage System for Concession 6, Part Lot 3**

I am writing this letter on behalf of my family who owns property immediately east of and shares the property line with the above-noted Concession and Lot.

Our family farm has been in the Hewitt name for the past 90 years. We love our property, and we know for certain, many of our neighbours also love living on Pegg's Mountain Road. We cannot quietly sit back anymore and watch our neighborhood be destroyed. We have serious concerns about the Application submitted by the Company, SolarBank. I have also read the Minutes from the meeting held in Katrine on November 2, 2022, and have learned that this proposed storage system is not storing energy from the solar panels already installed on this property, that it is actually storing energy off the main power grid. It appears to me that this is a convenient opportunity for the property owner to benefit from more passive income. Our concerns are outlined below.

#### **Environmental Impact and Safety of the Neighbourhood**

- What responsibilities does this property owner have to ensure the safe operation of this storage system and to ensure no harm will come to any neighbours and their properties?
- Does this storage facility give off noise?
- Does this storage system give off gasses and/or chemicals? Has research been done to determine if the gasses etc., are cancer causing?
- Do the other solar farms in the Burk's Falls area already have these storage systems in place?

## **Safety of the Storage System**

We have serious concerns about leakage, fire and explosion from this storage system and the leakage of chemicals into the ground and water sources. We have a dug well and plant a vegetable garden every summer. If our property becomes contaminated, who is responsible for providing us with clean water and healthy ground for the vegetable harvest. Would we simply receive an email from SolarBank saying "so sorry for your loss"?

We also have a lot of wildlife that call our neighbourhood home too. We see deer, moose, fox, rabbits, turkeys, just to name a few, on a regular basis. If the streams and ponds in the area were to become contaminated, then our wildlife would surely die.

## **Responsibilities of SolarBank and Liability for Damage to Property**

- Is SolarBank committed to providing emergency training to first responders in Burk's Falls, being the fire department, paramedics and police, in the event of a fire and/or explosion at this battery storage system?

We are very concerned that our Village Fire Department, which consists largely of volunteer fire fighters, is not equipped to deal with a major environmental catastrophe, which seems entirely possible with this type of battery storage system, given the news reports I am reading about this technology.

- Is SolarBank committed to paying the neighbours for loss and damage to property from a fire and/or explosion at this storage system?

We have researched this type of storage system and have learned that in the event of a fire and/or explosion, that the neighbourhood would have to be evacuated within a 20-mile radius, and that a fire of this nature can burn for days.

News Articles: [Emerging Hazards of Battery Energy Storage System Fires | FEMA.gov](#)

[Fire burns for five days at huge lithium-ion energy storage facility | Recharge](#)

['Close call' fire in Huntsville Ont. prevented](#)

I cannot image that the Township of Armour would agree to have such a facility built given that the Township must be aware of the high risk associated with environmental disaster, the potential for property damage and the potential for loss of life.

- Is SolarBank committed to performing regular inspections of this storage system? How often are these inspections going to take place? Is SolarBank going to report back to the Township Office each and every time they have conducted a successful safety inspection of this facility? Our research shows that a facility like this needs to be monitored

constantly for temperature, that the storage system needs to be kept within a certain temperature range and if one unit catches fire, it's a chain reaction.

#### News Article: Fire Inspection Requirements for Battery Energy Storage Systems - Hiller Fire

- When these batteries explode, what type of chemicals are released, are these chemicals then seeping into the ground and water supply?
- Are building codes and safety codes going to be followed when building this facility to ensure measures are in place in the event of a fire and/or explosion?
- These batteries will be located outdoors, how do they react to our cold winter temperatures? News Articles show that fires are more common in the cold temperatures with these batteries.

News Articles:

#### Understanding the Risks of Fire in Battery Storages - MoviTHERM

#### Lithium-ion batteries: Mitigating the risks around their use and storage - QBE Canada

Effect of low temperature on thermal runaway and fire behaviors of 18650 lithium-ion battery: A comprehensive experimental study - ScienceDirect [this article confirms that studies at low temperatures with these batteries are quite limited]

- If this type of storage facility is not storing energy from the solar panels already installed at this particular property, then our suggestion is that the company choose a location for its battery storage facility that is farther away from a populated community. Wouldn't an industrial area be more appropriate for this type of facility?
- Will our electricity next door to this facility, be affected, such as brown outs or black outs?

#### **In Conclusion**

I sincerely hope the Township of Armour research this type of storage system before approving this application and I strongly encourage the Township to consider a different location for such a facility, perhaps a less populated location.

I have read the reports provided by SolarBank, that have been posted to the Township's website and let's face it, a large corporation that operates globally can put whatever they want in their reports in an effort to appease us.

Also, if this facility is built and considered a success by SolarBank, then what does the future hold for the Burk's Falls area, battery storage facilities in every vacant field?

I look forward to attending the next meeting at the Township Office regarding this Application and I also hope that a representative from SolarBank attends this next meeting, as I will insist on an answer to each and every question set out in this letter.

I also hope that a representative from each of our first responders is present at this next meeting, it is vitally important that the police, fire department and paramedics are fully aware of what they are potentially dealing with in their community.

And finally, it saddens me a great deal to see our rural communities and our beautiful farm properties being severed for more housing and also leased out to these large companies and driven by one factor only, greed.

Sincerely,

*Alice Hewitt*

Signed for both Elizabeth Hewitt and Alice Hewitt  
Pegg's Mountain Road, Burk's Falls, ON P0A 1C0

## Charlene Watt (Deputy Clerk)

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**From:** Alice Hewitt  
**Sent:** February 3, 2025 7:09 PM  
**To:** Charlene Watt (Deputy Clerk)  
**Subject:** Re: Lithium Ion Battery - Application - question

Hi Charlene,

Thanks for your reply.

Is the Township of Armour not bound by the *Municipal Act* to provide the "adjacent property owners" with Notice of all applications? If there is a section in the *Municipal Act* that states the company making the application is allowed to notify the adjacent property owners, instead of the Township, please direct me to that section of the Act so I can read that.

My mom has received Notices from the Township for other applications made by adjacent properties, such as Creasor's application to sever three building lots from this same property next door to us, my mom has also received Notice of the sub-division proposal, now known as Milly's Way, off Ferguson Road, and many other Notices over the years for other applications.

It's not clear to me why the Township would provide mailing addresses for the adjacent property owners, to the company making this Application, rather than just send the Notices out directly from the Township office. Can you please explain why this was handled this way, and why the process of giving notice was not followed up on by the Township to ensure that all adjacent property owners were properly notified.

I will also be submitting a 2<sup>nd</sup> letter of opposition to this particular Application to include another concern my family has relating to the Gravel Pit/Quarry operated by Fowler Construction, across the road from Creasor's property and on the west side of the River Road. This company does regular blasting of rocks. When the blasting takes place, there is a definite tremor felt at our farm. There could be two to three blasts per day and the company provides us written notice of when the blasting will take place. This is a huge concern for us living next door, that this blasting and tremors felt through the ground could affect the stability of this battery facility. I will also include in my 2<sup>nd</sup> letter the fact that we (and others) did not receive notice of this Application back in 2022.

Once again, looking forward to hearing back from you.

Regards,  
Alice Hewitt

**From:** Charlene Watt (Deputy Clerk) <deputyclerk@armourtownship.ca>  
**Sent:** February 3, 2025 8:51 AM  
**To:** Alice Hewitt  
**Subject:** RE: Lithium Ion Battery - Application - question

Hi Alice,

This is not the first time that I've heard that people did not receive the 2022 notice. I do recall sending the mailing addresses to Abundant Solar (SolarBank took over Abundant Solar). I would suggest that when you make your submission opposing the lithium BESS that you declare that the 2022 notice was not received and other owners within the proposed BESS also did not receive the public meeting notice.

Thank you,

*Charlene Watt*

Deputy Clerk, Dipl.M.M.

Township of Armour

PO Box 533, 56 Ontario Street

Burk's Falls, Ontario P0A 1C0

Telephone: 705-382-3332

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Website: [www.armourtownship.ca](http://www.armourtownship.ca)

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**From:** Alice Hewitt

**Sent:** February 1, 2025 4:04 PM

**To:** Charlene Watt (Deputy Clerk) <[deputyclerk@armourtownship.ca](mailto:deputyclerk@armourtownship.ca)>

**Subject:** Lithium Ion Battery - Application - question

Hi Charlene, wondering if you can please clarify something else for me regarding the meeting held in November 2022.

I've copy and pasted and put in Bold below, a section from the application materials, as found on the Township website. It states that adjacent property owners were notified in 2022. My mother has confirmed to me that she did not receive written notice in the mail about this Application in 2022. I've also received verbal confirmation from another adjacent property owner that they also did not receive any written notice in the mail in 2022 about this Application.

Had we known this Application was brought to the Township in 2022, we most certainly would have attended the Public Meeting held at the Katrine Community Centre.

There may have been a Notice of the Katrine meeting posted to your website, but we are concerned about not receiving the written notice in the mail. I recall reading in the Minutes from the Katrine meeting that there was no public attendance, could that be because very few people knew about the meeting? We are not on the Township website every day to see what might be coming up by way of meetings and applications, etc., had we been notified by mail we would have at least been made aware of the existence of this Application in 2022.

**Armour Township Council met in 2022 to consider supporting a Lithium Battery Energy Storage System (BESS) at 219 Peggs Mountain Road. As part of Council's consideration, the public was engaged at the time by presenting the proposal publicly as well as hosting a Public Meeting at Katrine Community Centre, notifying the adjacent property owners.**

Is there any way for you to confirm that the written notices to the adjacent property owners were in fact mailed out?

I do remember my mother receiving written notice by mail for the application Mr. Creasor brought to sever the three building lots on the same property, which you've confirmed in earlier correspondence that this severance has been approved. This notification by mail process seems to be followed at other times.

Looking forward to hearing back from you.

Regards,  
Alice Hewitt

January 26, 2025

Township of Armour  
56 Ontario Street  
Box 533  
Burk's Falls, Ontario  
P0A 1C0

Attention: Deputy Clerk Charlene Watt.

Dear Deputy Clerk Watt,

I am writing this letter in response to the proposed building of a Lithium-Ion Battery Storage Facility located at 219 Pegg's Mountain Road. I do not support this project. My family farm is located at Pegg's Mountain Road, directly east and right next door to this property in question. We have enjoyed years of rural agricultural living on our farm, and we are being forced to watch our neighbourhood slowly decay. The building of three solar farms in the Burk's Falls area all within approximately 10kms of each other has been very sad to see. I do not understand why so many solar farms had to be erected in such a short time and all in the same area. My family can see two from our farm. Now we are finding out just this past weekend from a Facebook post of all things that this battery plant is the newest proposed scar on the landscape. I am not against green energy but there must be a balance. Three solar farms and now a battery storage plant is too much.

My family and myself have been researching these storage facilities recently and they seem very new with not much research to back them. They catch fire unexpectedly and spread to other batteries and the entire thing can blow up and emit toxic gases into the environment, poison the soil and the water. Is this how you want to treat our beautiful land in the Burk's Falls area?

According to my research there are only three or four of these such storage facilities in Ontario right now. So very new technology. No one knows the health risks associated with living near one of these plants, emergency services are just learning how to deal with electric car fires and how to extinguish them and treat folks with thermal burn injuries. When these plants blow up a major evacuation is needed, is Burk's Falls prepared for that? What about the after math when the water is poisoned, and several people are dead. Does the township have the insurance in place to handle multiple lawsuits from grieving families? The funds for land remediation? I think this project is just a quick money grab to supplement the township's tax income. There is no consideration given to adjoining property owners. If this was a fair process the property owners would have been invited to the November 2022 "public" meeting held in Katrine. Upon reading those minutes of the meeting I realized there were only three community members present, unnamed, which in all honesty were probably the council members and not the public at all. My family knew nothing of the meeting. I actually laughed at one question "have you heard from the adjacent property owners"?

Answer...No. The answer is no because none of them knew about it! I find it quite disgusting that local folks are not included in the early stages of these processes. Several phases are complete before the public even knows about the proposal of a project.

Which brings me to my next point. The Environmental assessment done for the Phase 1 planning was a site visit conducted in the winter? What are you going to glean from a property when it is covered in snow? It says in the document there were no invasive sampling techniques used. Doesn't the township think a proper environmental survey should include a plant and animal inventory, soil samples, water samples and possibly a mean temperature survey done since these batteries are very temperature sensitive? They are going to sit in the middle of a field in a shipping container with no sun protection in the summer and no wind protection from freezing temperatures in the winter? I know they are supposed to have a temperature-controlled environment with a built-in alarm system if things go wrong, the tech team will be dispatched. Where does the tech team come from, the GTA? What happens if Highway 11 is closed for 3 or 4 days like we have just seen happen this winter due to record amounts of snowfall. Do we just wait several days for the geek squad to get there and fix things?

I also learned that these batteries are not even going to be used for the storage of solar power, they are being charged overnight by electricity from the grid! So, what is the point of having them located at the site of a solar farm? Make this Solar Bank company find a new location. If there is such a need for energy storage, why is Hydro one not installing these battery storage facilities at their transfer stations? These are already established locations with the proper security and fencing, proper land use zoning. It makes no sense to me.

I think it's time we took a stand against these big companies that want to invade our peaceful land. We enjoy our rural lives, that's why we live here right? I always try to put myself in other people's situations before I make a decision, I encourage you to do that too. Would you live next door to this? Would you risk your health, and the unknown risks associated with this plant? I don't think so, so please don't expect myself and my family to do the same. You are gambling with too many unknowns with this project. Let some other willing communities try it first if they want to. We are not guinea pigs on Pegg's Mountain Road.

I appreciate you taking the time to read my letter. I would also appreciate it very much if you let myself and my family know when the next meeting is, after all that's only fair.

Sincerely,  
Grace McCoy.

## **Charlene Watt (Deputy Clerk)**

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**From:** Lisa Haggart  
**Sent:** January 25, 2025 9:15 AM  
**To:** Charlene Watt (Deputy Clerk)  
**Subject:** Subject: Concerns Regarding Lithium Battery Storage in Armour Township Dear Mrs. Watt, I hope this email finds you well. I am writing to express my deep concerns regarding the proposed lithium battery storage initiative in Armour Township, as mentioned...

## Battery Energy Storage Systems (BESS)

### Assessment of Community Risks

#### Introduction

Ontario has placed emphasis on grid-scale Battery Energy Storage Systems (BESS) to address shortfalls in electrical generation capacity that may occur due to the shutdown of the Pickering nuclear station and increasing demand for electricity. Proponents see this technology as key to addressing the intermittent nature of renewable power generation. BESS is a relatively new technology; however, installations around the world provide significant information on design requirements and actual operating benefits. Learning from the operating experience of other facilities reveals risks associated with the technology and highlights the need for changes in the industry standards that govern development of BESS facilities. The overarching goal of the Government of Ontario should be to ensure that projects using this technology will not harm residents of Ontario or result in adverse environmental impacts.

#### Incidents Reported at BESS Facilities

The 2021 fire in the Tesla's 300 megawatt (450 megawatt hours) Megapack in Geelong, Victoria, Australia received considerable media coverage. This situation highlights the potential risks from BESS facilities:

*The fire started on the morning of Friday July 30 and was not brought under control until the afternoon of Monday August 2. More than 30 fire trucks and support vehicles and about 150 fire fighters from the County Fire Authority and local Fire Rescue Victoria responded, containing the flames so they only affected two Megapacks of the approximately 210 that make up the system.<sup>1</sup>*

This incident is of particular note as it occurred in a facility designed and built by a company with extensive expertise in lithium battery technology. The duration of the fire and the scale of the response raise concerns. While Australian states have infrastructure to fight forest fires that can respond to this emergency, most municipalities, particularly in rural Ontario, do not

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<sup>1</sup> CNBC News, Tesla Megapack fire highlights issues to be solved for utility 'big batteries', August 5, 2021.

have easy access to 150 firefighters that could be dedicated to an incident for 3 days, as was the case with this situation.

It is not an isolated incident: other similar situations have been documented in the United States. A fire at a BESS facility in Chandler, Arizona received wide coverage<sup>2</sup> and other incidents were assessed by authorities responsible for setting fire standards for the United States.<sup>3 4</sup> This suggests that Ontario should be moving with caution on new BESS projects.

The potential for issues with BESS technologies should be viewed in the context of the experiences of rural Ontario communities with wind turbines. Even though they have since proven inadequate, at least the government set out some basic requirements for wind turbines such as separation from people's homes. These and other limitations governing the basic parameters for the approval of these projects were put in place before approvals were accelerated. A comprehensive set of reports that were made widely available before any community consultation or request for municipal support could move forward. While there are serious gaps in this process, it is robust compared to the review and consultation process that is currently underway for BESS in Ontario.

As we saw with the approvals for wind power, it could be left to "host" communities to deal with any negative impacts of these projects.

### **Key considerations**

There are several key issues to consider related to BESS technology. These issues are developed based on reviews of proposals published as part of the current RFP process; responses to questions from residents that will be affected; and a review of published reports on incidents involving BESS technology.

It is not intended to be a comprehensive study but rather, an overview of the rapidly evolving situation while identifying current work in this area that is relevant to the problem and providing some preliminary suggestions on potential content for an Ontario regulation related to this technology. Even these preliminary findings indicate that a need for the IESO and Ontario government ministries **to put a more rigorous regulatory framework in place before BESS projects are approved and implemented.**

This view that more regulations are required is shared with the Canadian Renewable Energy Association or CanREA which notes the need for these requirements in their January 2022

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<sup>2</sup> News 10 Phoenix, Fire at Lithium Battery Storage Facility prompts Evacuations, April 22, 2022.

<sup>3</sup> North American Electrical Reliability Corporation, Battery Energy Storage Cascading Thermal Runway, Lesson Learned, 21010301, March 29 2021, pp.1-4.

<sup>4</sup> National Fire Protection Association, Battery Energy Storage Hazards and Failure Modes, December 3, 2021.

white paper, "Laying the Foundation."<sup>5</sup> In particular, CanREA recognizes the need sufficient expertise in regulatory bodies to fairly evaluate proposed energy-storage installations.<sup>6</sup>

Based on the findings outlined here, it is clear that work is required on the Ontario process for approving BESS projects so that the errors of the Green Energy program are not repeated.

### Underwriters Laboratory (UL) Standards for BESS Systems

Canadian regulators generally point to two standards in terms of the requirements for BESS. For example, the Canadian Electrical Safety Association document published in May 2022<sup>7</sup> references a UL standard, **ANSI/CA/UL9540**.<sup>8</sup> This is safety standard for an energy storage system and equipment intended for connection to a local utility grid or stand-alone application. It designates key issues associated with these systems including safety of the battery system, functional safety, fire detection/suppression/containment and environmental performance. The standard was adopted in February 27, 2020 and updated on April 9, 2021.

The second standard, **UL9540A**<sup>9</sup> is related to the base UL9540 standard. It outlines a test methodology to evaluate the fire safety characteristics of a storage system at each of the cell, module, unit and installation levels. The focus is the ability of the BESS installation to handle thermal runaway propagation. Performance criteria are specified for each level within the installation. Meeting the criteria for each level is required before moving to the next level. Any installation that does not meet the applicable performance criteria is considered non-compliant and would need to be revised and re-tested.<sup>10</sup> These tests are designed to be undertaken in specialized fire testing facilities.

The UL9540 covers storage capacities up to 50 kWh. Installations larger than this need to comply with UL 9540A fire test performance criteria. These standards have been developed for the United States but have also been adopted for use in Canada.

### National Fire Protection Association (NFPA) Standard 855

The US-based NFPA views BESS installations as systems that can provide clean, low-cost sources of energy but it notes that they also present significant life safety hazards. NFPA 855<sup>11</sup>, a "Standard for the Installation of Stationary Energy Storage Systems", was originally published in 2020 to address the dangers of toxic and flammable gases, stranded energy, and increased fire intensity associated with using lithium metal or lithium-ion batteries. Based on learning since 2020, this standard has already been updated in 2023 requirements for fire detection and suppression, explosion control, exhaust

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<sup>5</sup> Canadian Renewable Energy Association, Laying the Foundation, January 2022.

<sup>6</sup> IBID, page 14.

<sup>7</sup> Ontario Electrical Safety Code, Bulletin 64-7-1, Installation and Approval of Energy Storage Systems, May 2022.

<sup>8</sup> UL Solutions, Energy Storage Systems and Equipment, UL Standard 9540, 2<sup>nd</sup> Edition, February 27, 2020.

<sup>9</sup> UL Solutions, Standard for Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems, UL Standard 9540 A, November 12, 2019.

<sup>10</sup> UL Solutions, Webinar - Canadian Codes and Standards for Energy Storage Systems, May 13, 2021.

<sup>11</sup> National Fire Protection Association, NFPA 855, Standard for the Installation of Stationary Energy Storage Systems, 2020.

ventilation, gas detection, and thermal runaway have been added or revised.<sup>12</sup> In a technology environment that is rapidly changing, this more recent standard may include important new information. Even though this is a US standard, it can also be used for BESS projects in Canada.

## Fire Suppression Systems

As there is no IESO requirement to address fire safety issues as part of the community meetings or requests for municipal support required in the RFP process, there is limited published information on how the proponents of BESS projects intend to comply with appropriate standards.

For example, Solar Flow-Through Funds, the company proposing a BESS system in Chesley (Arran-Elderslie), did not include this information in its presentation to the Arran-Elderslie Council when the municipal support resolution was requested nor is reflected in its community presentation. Limited information was provided to a local resident in response to a specific question about fire safety. The company responded that the system proposed for Chesley would include a comprehensive Fire Suppression System consisting of at least seven layers of protection. Below is the company description of each layer:

- First, the batteries are isolated from each other to prevent any current from flowing between them.
- Second, there are gas and fire monitoring and controls for each battery, rack and cabinet that provide immediate isolation, suppression, and mitigation in the experience of a thermal event.
- Third, each battery module can be isolated from the overall system, shut down and thermal management applied to suppress propagation.
- Fourth, deflagration systems are built into the containers that are designed to release gases in case of a build-up. The deflagration systems are designed to allow the container doors or roof to blow off if the gas detectors detect a rise in gas concentration beyond prescribed limits. When gases are released, the probability of a fire is significantly reduced as it is the combination of pressure, concentration, and heat that can cause a fire/explosion.
- Fifth, the fire suppression is planned to be accomplished with a potassium nitrate aerosol-based generator. Potassium Nitrate is a benign ionic salt.
- Sixth, in the event of a fire, a dry pipe sprinkler system is triggered to eliminate all thermal events within the cabinet.
- Finally, each system has 24/7 monitoring requirements and annual preventative maintenance plus training for the operators.

Other safety measures described include 24/7 remote monitoring to ensure normal system functioning. This system is monitored for performance and safety continuously and integrated with the IESO command center to perform the dispatch functions required by the system operator.

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<sup>12</sup> IBID,2023.

This layered system generally aligns with the requirements of UL9540, but the response did not provide a commitment that the system would meet the performance standards for 9540A testing. The statement that training would be provided for operators conflicts with the statement at the municipal council that the proponent would have no local operators but would contract with local electrical suppliers to undertake required repairs and maintenance. These contract arrangements will not ensure the availability of trained resources in the event of an emergency.

The discussions at the Prince Edward County Municipal Council<sup>13</sup> meeting regarding a municipal support resolution for a BESS project included a lengthy assessment of these provisions. Inadequate provisions to address fire safety issues were a key reason why the proposal did not receive support.

Safety measures were also a concern raised by residents living near the RES project proposed for Enniskillen Township.<sup>14</sup> Enniskillen Mayor Marriott said township officials tried to gather information on battery storage projects from provincial agencies and officials while attending a recent Rural Ontario Municipal Association conference in Toronto, "but the information is fairly sparse."<sup>15</sup>

### Hydro One Setback Standards

The standards discussed above are primarily focused internally on the design of the battery structure but Hydro One has a set of additional standards that defines how BESS systems will be positioned relative to Hydro One infrastructure. As part of its Transmission Generation Interconnection Requirements, Hydro One includes a specific section on Setback Considerations for BESS facilities.

Hydro One explains that these requirements are necessary because:

*Lithium battery storage facility fires can generate intense heat and smoke for prolonged periods of time and are difficult to extinguish. If these facilities are located in close proximity to Hydro One transmission facilities, there is an increased risk to the system. Of more concern is the risk associated with a fire in the BESS that can damage the Hydro One facilities and/or cause line or station equipment flashovers due to the ionization of the air. This can cause Hydro One facilities to be taken out of service and pose a risk to safe, secure and reliable operation of the transmission system.<sup>16</sup>*

Hydro One has established minimum set-back distances for BESS systems from Hydro One facilities as outlined in the following table.<sup>17</sup>

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<sup>13</sup> Municipality of Prince Edward County, Municipal Council, January 31, 2023.

<sup>14</sup> Sarnia Observer, Oil City Battery Storage Proposal Dead in the Water, February 16, 2023.

<sup>15</sup> Sarnia Observer, Battery Storage Project Proposed, January 25, 2023.

<sup>16</sup> [Hydro One, Transmission General Interconnection Requirements](#), December 8, 2020, pg.22

<sup>17</sup> IBID.

Item #	Hydro One Facilities	Setback Distance
1	500 kV Right of Way	500 m
2	230 kV Right of Way	350 m
3	230 kV or 115 kV Right of Way with 2 or more double circuit 230 kV or 115 kV lines	250 m
4	115 kV Right of way with single circuit 115 kV line	150 m
5	550kV station	500 m
6	230 kV switching station	350 m
7	115 kV Switching station or a 230 kV or 115 kV step down station	250 m

*Source: Hydro One, General Transmission Interconnection Requirements, 2021*

As Hydro One is involved in confirming circuit capacity availability, it is assumed that these setbacks will be implemented as part of that process. Enbridge advised residents that setbacks used in the petroleum industry were reflected in the design of the project proposed for St. Clair Township.

If Hydro One and Enbridge are concerned about the impacts of BESS facilities on neighbouring activities that it requires setbacks from rights of way and facilities, **should similar setbacks not be incorporated into a provincial standard that would also apply to municipal road allowances and/or other improvements on adjacent land?**

### Requirements for Local Emergency Resources

The emergency response capabilities and resources available to respond need to be aligned with the types of emergency situations that can be encountered at each BESS location. As shown in the 2021 Tesla fire noted above, significant fire resources can be required for an extended duration to deal with emergency situations at these facilities.

This situation and emergency events at other BESS facilities provide some key learning for the emergency response plans for the BESS facilities being approved for Ontario:

- Rapid emergency responses are required suggesting that automated calls sent directly to the emergency call system for the community when an emergency situation is detected.
- Local emergency crews who respond need to be trained to handle lithium fires.
- While water will not put out a fire in a lithium battery, large volumes of water are required to cool all adjacent modules to stop an expansion of the fire. As a result, hydrants connected to a municipal water system are recommended on site.<sup>18</sup> The dry pipe system proposed as part of the BESS facility in Chesley assumes that this water source is available.
- The facility needs to be designed to allow emergency personnel to reach the problem module and to introduce water into the container at a safe distance.

<sup>18</sup> Brendan D. Miller, P.E. Westwood Professional Services, 4 Requirements you may be missing on your BESS project, July 28, 2021.

- Toxic fumes can be released when most of these facilities are experiencing an emergency situation. These emissions can contain hydrocarbons, carbon dioxide and carbon monoxide.<sup>19</sup> These can include flammable gases and designs include venting procedures to prevent an explosion within the unit. These situations need to be monitored remotely with warning provided to affected people.

The ability of the local community to supply these emergency resources needs to be confirmed as part of the approval process and in many cases may determine the locations where these facilities can be developed. An emergency plan should be developed in conjunction with the host municipality for each site that documents which services are expected from the municipality and which services the proponent will be providing or sourcing elsewhere. This plan should be reviewed and updated annually.

In response to questions from a local resident about the proposed St. Clair BESS, Enbridge stated that there were going to provide equipment and training to local fire departments as part of their implementation. Enbridge also stated that it is evaluating how it might integrate local Enbridge staff to work in conjunction with local fire departments in the event of a fire emergency. This confirms that Enbridge sees these risks are worth addressing and all projects should be providing similar support to local emergency services.

## Noise Emissions

The potential for noise emissions from BESS installation has been raised at a number of public meetings with the discussions largely centred on the equipment used to cool the batteries. In most of the discussions, it has been generally dismissed by proponents as “just noise from fans”.

More details on the noise emissions were provided in the discussion at the Arran-Elderslie Council meeting<sup>20</sup> in response to a specific question from a Councillor. The proponent indicated that current ventilation systems used for their type of small application generated noise levels of about 75 dBA at source. They expected that this noise level would decrease to a 40–45 dBA level over distance, but no support or engineering estimates for these statements was provided. The proponent also stated that the facility would be located in an area zoned for light industrial uses (i.e., not residential) where noise of this level could be expected.

Though not challenged at the Council meeting, there is a reasonable probability that these noise emissions of 75 dBA will violate the Arran-Elderslie noise by-law. Section 3.16<sup>21</sup> of this by-law prohibits commercial operations from discharging noise that is clearly audible 15.25 metres (50 feet) from the property line on which the structure is located. **The proponent was not correct** in stating that noise levels are determined by the zoning of the property on which the operation is located. In Chesley, it is assessed based on noise levels at nearby receptors. If the nearby site is seniors’ housing that is designated as a “Quiet Zone”, noise emissions are more restrictive.

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<sup>19</sup> UL Solutions, Webinar - Canadian Codes and Standards for Energy Storage Systems, May 13, 2021.

<sup>20</sup> Municipality of Arran-Elderslie, Video of Municipal Council Meeting, January 9, 2023.

<sup>21</sup> Municipality of Arran-Elderslie, By-law 61-09 (Noise Bylaw), November 9, 2009

The District Office of the Ministry of Environment Conservation and Parks will have a role in responding to any complaints that are logged with the Spills Action Centre or the local ministry offices. Addressing the noise levels early in the development process to ensure would reduce the need for local interventions after the project is built. In particular, noise barriers can be used to address these problems but a noise assessment of each location should be included in the application so that the need for any remedial sound abatement can be addressed before the project is approved. This would also allow the abatement to be designed before the construction phase is understood,

Transformer stations are another potential source of problem noise. Regulation 359/09 sets out noise mitigation measures for transformer stations linked to renewable energy projects.<sup>22</sup> It is assumed that these will also apply to any transformer station needed to link a BESS to the grid.

## IESO Requirements

The IESO's current submission requirements for applicants to respond to the RFP with a BESS project are fairly general except for those requirements that relate to the contractual relationship with the IESO. The requirements in the contract are similarly general:

*The Supplier agrees to design and build the Facility using Good Engineering and Operating Practices and meeting all relevant requirements of the IESO Market Rules, Transmission System Code, Distribution System Code, the Connection Agreement, in each case, as applicable, and all other Laws and Regulations. The Supplier shall ensure that the Facility is designed, engineered and constructed to operate in accordance with the requirements of this Agreement<sup>23</sup>*

Beyond "using Good Engineering and Operating Practices", there are no further details in terms of the standards that need to be met. Similarly the "Municipal Support" form does not require the submission of any information on standards the proposed project will meet. The primary focus of the RFP and contract on matters of direct concern to the IESO: bid price, timing of completion, etc. With the limited information submitted, it is not clear how the IESO will distinguish between submissions in which bid price reflects an identified need to invest heavily in safety features and practices and one that has cut corners in the design to generate a lower bid price. Similarly, the value of a Municipal Support Resolution based on the minimal information required is questionable when municipal support may be withdrawn when the full details of the project are known. The legal implications in the event that a municipality withdraws its support resolution after a proponent has been awarded a contract are unknown. If a proponent has incurred costs for consultancy reports, deposits for equipment and infrastructure components, etc., is it possible the company could opt to initiate legal action against the municipality as a means of coercion if support is withdrawn?

The limited role of the IESO was less of an issue with wind turbine and solar projects when the IESO was only responsible for the approval of the contract. For those projects, there was a separate approval process operated by the environment ministry that had an application and municipal consultation process that a required detailed submission documenting the details of the proposal including

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<sup>22</sup> Ontario, Regulation 359/09 Renewable Energy Projects, Section 35, October 10, 2009.

<sup>23</sup> Ontario Independent Electricity System Operator, ET1 – Contract Consolidated – February 3, 2023, Section 2.1 a

equipment proposed for use, siting arrangements, operating procedures, estimates of noise emissions and decommissioning arrangements. It is not clear what additional approval steps the IESO or the government as a whole are anticipating being applied to these projects.

## Role of Ontario Regulation 359/09

Development of some renewable energy facilities is regulated by Regulation 359/09. As shown by this review, a BESS facility can generate emissions that can be considered as “Adverse Effects” as defined by the Environmental Protection Act.<sup>24</sup> A BESS can also require significant resources from the host municipality.

**There are no specific regulations applicable to BESS projects.**

The field staff of the Ministry of the Environment, Conservation and Parks will be responsible for management of any complaints about their noise emissions. This creates the potential for regulations and enforcement procedures related to BESS facilities to be developed after construction through the enforcement process.

New BESS facilities can also be linked to wind and solar projects which are covered under the Regulation and it is expected that new wind and solar projects may incorporate BESS capabilities to maximize revenue generated by the projects.

Despite these relationships, BESS projects are neither included, nor excluded, from the list of activities covered by Regulation 390/09. This regulatory environment needs to be clarified before moving forward with the approval of BESS projects:

- The approval process set out by the IESO only deals with the contractual relationship related to the generation and sale of electricity.
- The information that proponents are providing to municipalities to request a support resolution is not sufficient to consider this endorsement as an “approval” to proceed with construction of the project.
- The technology and standards related to BESS facilities continue to evolve rapidly, meaning that it is inappropriate to leave the technical requirements in the hands of local municipal building officials.

## Cost/Benefit Assessments

The IESO requirements for presentations to community meetings or municipal councils did not include any requirement to present cost-benefit analysis for the specific BESS project; however, proponents in the meetings already reference did put forward benefits from the project being proposed.

In their presentations, Solar Flow Through Funds focus on preventing local brownouts. For example, in their presentation to Arran-Elderslie Council,<sup>25</sup> the company representative indicated that the area had

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<sup>24</sup> Ontario, Environmental Protection Act, RSO 1990, July 1, 2020, Section 1 (1) Interpretation – Adverse effect.

<sup>25</sup> Municipality of Arran-Elderslie, Video of Municipal Council Meeting, January 9, 2023.

been identified by the IESO as needing this type of back-up capacity “to prevent potential brown-outs” in the Chesley/Paisley area. In a subsequent question, the Deputy Mayor reported on a community meeting where she learned confirmed that isolating the community from brown-outs was a key driver of the project.

This information presented to Arran-Elderslie conflicts with the priorities indicated in the IESO RFP which is focused on fixing capacity issues west of London and east of Pickering as the current problem areas. Four of the six sites being proposed by Solar Flow Through align with those criteria and it not clear why the IESO has specifically identified Chesley as a problem location or how a 4.99 MW project that is only capable of generating 19.96 megawatt hours for a period of four hours would provide a robust solution to this problem. It is also unlikely that Chesley would have a higher exposure to brownouts than other area communities without BESS facilities if the project did not proceed.

As no proponent has been willing to discuss costs for their proposed BESS projects, it is difficult to prove confirm that these BESS projects are providing real value to electricity users across Ontario. Given that the IESO reports that 70% of capacity shortfalls last for more than four hours<sup>26</sup>, the concern about the parallel community risk being created by increasing dependence on what is a very expensive supply with a very limited output.

## Conclusion

Residents of rural Ontario have extensive experience with energy projects that were approved without sufficient attention to the impact on people and communities. We are concerned that the current IESO RFP is repeating the mistakes of the past by launching a new RFP process that requires very few details on what is proposed or how its operation will integrate with existing municipal structures and services.

We do not want the situation with wind turbines to be repeated. The failure of the IESO or other agencies of the Ontario government to set out a comprehensive set of siting requirements for battery storage systems seems to be preparing rural Ontario for a repeat of the situation with wind turbines.

## Recommendations

It appears that the process for projects receiving an IESO contract is that following acceptance of a submission, the proponent would proceed to develop a more detailed proposal for implementation to be presented to local building officials for review and issuance of permits. Given the complexity of these projects and the rapidly changing technology, it is expected that this process could result in substantial delays in implementation of these projects as each small municipality involved gains an understanding of the detailed requirements required to issue the necessary permits. At the same time, these projects require detailed support from municipal partners meaning that the final approval must rest with local authorities.

On that basis, it is recommended that BESS systems be added to the list of renewable energy projects covered by Regulation 359/09.

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<sup>26</sup> IESO, LT1 RFP and Additional Mechanisms Engagement, June 9, 2022, Slide 14.

In addition, Regulation 359/09 needs to be amended to add setbacks from nearby activities. These setbacks would likely, at a minimum, mirror the setbacks established by Hydro One for setbacks from their facilities.

Proponents awarded contracts should be required to present detailed proposals for review by the Ministry of Environment, Conservation and Parks for technical completeness. These proposals should include the following:

- A design showing the proposed location of the facility in relationship to nearby activities that could be affected by an emergency at the facility.
- Confirmation that their technology provider(s) assembling the completed battery storage system has been certified by an accredited body that the BESS conforms to all requirements of ANSI/CAN/UL 9540A and NFPA 855.
- Confirmation that the design of the project includes fire monitoring and suppression system in the design of the project.
- A detailed construction and commissioning plan, including the on-site expertise required from start of construction to connection to the grid.
- The proponents must confirm that noise emission from all aspects of the proposed project will meet the requirements of the noise by-law of the host municipality or not exceed 40 dBA nighttime, and 45 dBA daytime, at the closest receptor to the project during times when the receptor is downwind of the project site whichever is more restrictive. Where noise barriers are required to meet these standards, they would be shown in the design of the facility.
- The proponent must confirm that it has established an emergency plan, in conjunction with the local municipalities and fire authorities, in the event of a battery fire. This would include details on the resources that it is expected that the host municipality would provide.
- The proponent must confirm that its emergency plan includes a communication plan with nearby residents and the local communities in the event of a battery fire.
- The proponent must confirm that its emergency plan includes an evacuation strategy for nearby residents, and livestock if necessary, in the event that evacuation is required.

Once the MECP has confirmed that the plan is technically complete, the package would be presented to the community for comment and the municipality Council for review and approval.

Only after the project has been reviewed by MECP and approved by the host municipal council would the formal requests for building permits be initiated.

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