

March 15, 2021

Mr. Scott Erbisch
County Administrator
Marquette County
234 W. Baraga Avenue
Marquette, MI 49855

Re: Citizen for a Safe and Clean Lake Superior Web Site

Dear Mr. Erbisch,

Our business intelligence systems recently identified the name of our corporation in an article published on the Citizen for a Safe and Clean Lake Superior Web Site. After review, we understand this group has used our report to Marquette County for the Michigan Launch Initiative RFP. We wish to point out that some of the statements made in the article use part of our report out of context and could be misleading to people not familiar with space launches and the space industry.

In the "Switching" section of the text, they mention that "Explorer Solutions warned of a "catastrophic risk" and of "potential loss of human life" and a "blow up of the launch vehicle at lift Off"". These expressions are part of the Launch Safety Regulatory Document that every Launch Site Operator must prepare to receive approval to operate from the national regulatory body (FAA - US). They make reference to procedures (Standard Operation Procedures), steps and methodologies that must be put in place, tested and personnel trained on to avoid these situations from occurring. They are part of ground safety, flight safety and the environmental safety requirements.

You will find similar wording in Maritime, Rail, Aviation and Trucking Safety and Security Bylaws and operating procedures.

Another statement talks of the evacuation of 5 or 6 houses. Such an evacuation depends on a few factors: first the exact location of the launch pad will impact the required protection zone of a minimum radius of one kilometer (0.62 miles) between the Launch Pad and any residence. So according to the final location of the pad such evacuation may not be required. The size and type of launch vehicle is another factor. In the case of the Loma Launch Site, the targeted payloads are nano, mini and small satellites requiring smaller launch vehicle which meets the proposed protection area.

The next statement talks of "falling debris". The first and second stage debris are envisioned to fall in Northern Ontario and/or Hudson Bay depending on the flight trajectory and type of Launch Vehicle.

Again, these steps are planned, and the location of falling debris will be known, and a specialized recovery team will be waiting to recover the debris.

Finally, in the “Where we stand now” section, the article talks of the “water deluge suppression system”. This is a system used at most space launch sites – it usually draws water from a water tower and various ducts, conduits and engineering works can mitigate impact of the flow of water emerging from under the rocket.

Overall, the Launch Base Safety Regulatory Document also includes an environment policy which may contain statements such as:

- To reinforce the natural environment consideration in the definition of a launch base activity
- To master the environmental risks particularly the possible impacts of the L/V at lift off and in flight (pollution, debris)
- To realize a rational use of natural resources like water.

Through FAA the Space Industry must meet very stringent regulations to ensure the safety of the launch vehicle, of the people on-board and in the vicinity and of the environment.

We do not foresee the Loma Launch site as having anything close to a significant environmental impact. It would our pleasure to further elaborate or participate to an information session.

Sincerely,



Christian Perreault
Executive Vice-President
Explorer Solutions