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All Out to Stand with Striking Salt Workers in Windsor!

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June 29 Rally and Day of Action to Support Windsor Salt Workers!

Unifor has called a Day of Action and Rally to support the striking Windsor Salt workers represented by Unifor locals 1959 and 240 in Windsor, Ontario on Thursday, June 29 at 12:00 noon at Windsor's City Hall (350 City Hall Square).

"It is critical to show members on strike, their employer, and elected officials, that Unifor members across the country are watching this dispute closely and that our members have our unwavering support," Unifor says.

Unifor is encouraging its members to organize buses and to send delegations. If you can't attend, you are encouraged to take a picture on the day with your coworkers or by yourself and post it to social media using #SolidarityWindsorSalt to show your support. Salt workers from other parts of the country will also attend the rally to bring their support.

Workers' Forum encourages everyone to go all out to express their support for the striking salt workers by joining the rally if they can or the social media action. It is by standing as one and refusing to accept that there is no alternative to anti-social nation-wrecking by U.S. cartels that a way forward can be found that favours the social and natural environment. It can be done!

A Significant Demand from all Ontario Teachers' Unions to Their Pension Fund

Active and Retired teachers on picket line at Windsor Salt, May 31, 2023

On June 20, on behalf of 200,000 educators in Ontario's publicly funded education system, the presidents of the four unions representing teachers in Ontario jointly raised their concerns over the Ontario Teachers' Pension Plan's (OTPP) major investments in Stone Canyon Industries Holdings (SCIH) in a letter to the OTPP's President and CEO. SCIH is the U.S. holding company that has attacked Canadian salt workers and salt production in Alberta and Nova Scotia and now is doing the same in Ontario, having forced salt workers in Windsor, Ontario out on strike on February 17, 2023.

The letter states:

"We are writing on behalf of 200,000 educators in Ontario's publicly funded education system to express our concerns regarding a troubling situation involving American-based company, Stone Canyon Industries Holdings (SCIH). Our concerns are heightened given that the Ontario Teachers' Pension Plan (OTPP) is a major investor in SCIH.

"As you know, SCIH acquired the parent company of Windsor Salt Company in 2020. Currently, Windsor Salt Company workers are engaged in challenging negotiations for their first contract with SCIH. The affected workers include miners responsible for producing road salt at the Windsor Salt Ojibway Mine, as well as employees at the evaporation processing plant who produce food-grade table salt.

"On February 17, 2023, miners from the Windsor Salt Ojibway Mine and clerical staff from the evaporation processing plant, represented by Unifor Local 1959 and Unifor Local 240 respectively, initiated a strike. The justified job action was in response to SCIH's proposal to outsource union jobs. The refusal to bargain unless deep concessions are agreed to is counter to how the bargaining process works.

"As members of the Ontario Teachers' Pension Plan and governors of the Ontario Teachers' Federation, we strongly condemn any attempts to undermine unions or a free and fair collective bargaining process. Union-busting actions not only contradict the values of our unions, but also harm the reputation of the OTPP. Furthermore, they fail to align with the Environmental, Social, and Governance policies of the OTPP.

"Our members do not want their pension contributions to be used to harm other workers. If the OTPP is truly committed to supporting and respecting workers and their rights, including the rights to unionize, collectively bargain, and strike, it must adhere to the values of the plan and honour all stakeholders. As one of the largest pension plans in the world, the OTPP must uphold ethical and social justice investment practices that align with the values of the members whom you are entrusted to represent.

"We stand with the workers of Windsor Salt Company. On behalf of our respective members, we are asking the OTPP to join us in publicly reaffirming a commitment to free and fair collective bargaining, as Windsor Salt workers strive to reach a collective agreement that is fair, equitable, and respectful of their rights."

Retired teachers and education workers on Windsor Salt picket line, May 18, 2023.

Empower Yourself Now applauds Ontario's teacher unions for taking this stand together. It is a clear indication that when it comes to the rights of workers to negotiate collective agreements acceptable to themselves and their communities, teachers stand as one and do not want their pension funds used to finance union-busting activities such as those SCIH engages in. This is all the more significant given that teachers are currently in negotiations with the Ontario government which is dictating all kinds of arbitrary changes to teachers' and education workers' working conditions using its majority to pass through legislation without any negotiation let alone consultation. By standing against the use of their pension funds to attack workers at Windsor Salt, teachers' and education workers' unions are taking a stand for the rights of all working people in Ontario.

To date the pension fund has responded to concerns on the matter raised for months by teachers and their unions, including at the OTPP's annual meeting in April, by claiming that they do not interfere in the day-to-day operations of the companies they invest in and that they leave this to the company's "management teams."[1] [2] This response was clearly not acceptable to the Plan's shareholders as the letter from the teachers' unions makes clear. The OTPP has a seat on SCIH's eight-member Board of Managers, showing that in fact they do oversee Stone Canyon's activities as managers. Using investments from the OTPP, SCIH has gained a monopoly in the global salt industry.

OSSTF provincial council rises in support of Windsor Salt workers, June 2, 2023

SCIH is using its monopoly to carry out plant closures as it did in Lindbergh, Alberta and to force salt workers across Canada to accept concessions as it did in Pugwash, Nova Scotia and is now

attempting to also force contracting out in Windsor, Ontario. To do this it uses disrespectful and dishonourable tactics that are not acceptable to Canadians. SCIH's ultimate goal is to try and reduce the claim of the workers on the value they create from salt extraction and processing using contracting out and other schemes all to increase their profits. Evidence of their intentions is that at the outset SCIH hired one of the most notorious union-busting law firms in the United States, Jackson Lewis, to run their negotiations with its workers at Windsor Salt as well as at Morton Salt, its parent company, which owns salt operations in the United States.[3] Canadians want to make sure salt operations in Canada are not used to harm workers and their communities by reducing them to operations which consider the workers disposable.

The OTPP's claim about its non-interference in companies is also contradicted when it openly says it uses its investments in fossil fuel-emitting companies to influence their operations so as to contribute to reducing carbon emissions. It cannot have it both ways.

It is high time the OTPP comes into line with the clearly expressed wishes of its shareholders and takes an unequivocal stand against Stone Canyon's union-busting activities and disrespect for Canadian workers who provide a critical natural resource without which society could not function.

Notes

1. "Teachers Raise Concerns About Having a Say Where Pension Funds Are Invested," *Empower Yourself Now*, April 14, 2023.

2. "It's High Time the Ontario Teachers' Pension Fund Divests from the Union-Busting Firm Stone Canyon Industries Holdings Inc.," Enver Villamizar, *Empower Yourself Now*, May 2, 2023.

3. Union-busting in Canada by U.S. Law Firm Jackson Lewis," *Empower Yourself Now*, March 6, 2023 .

For Your Information

Salt and Those Who Extract and Process It Are a Critical Resource

Skids of salt in yard of Charron Transport during Windsor Salt strike.

Sodium chloride salt, commonly known as table salt, is a ubiquitous compound made up of ions of

sodium and chlorine. It is widely used in numerous applications across various industries. It is either mined from below the earth's surface as solid rock salt or extracted through an evaporation process with the salt either having been extracted through wells or by trapping salt water in shallow ponds. Sodium chloride salt is a vital compound for the functioning of a modern society and shows great potential for future technological advances such as in its ability to generate and store energy. It also poses environmental concerns if not handled and disposed of properly.

Canada is fortunate to have large reserves of salt with its biggest mine in Goderich, Ontario, and other major Canadian salt deposits in Nova Scotia, New Brunswick, Quebec, Manitoba, Saskatchewan, Alberta as well as in other parts of Ontario. Possibly the biggest deposit of salt has recently been identified in Newfoundland and is currently the subject of confirmation for its potential.

For the information of our readers, we are providing an overview of the applications of sodium chloride salt so that this natural resource, and those who extract and process it, can be appreciated.

Essential to Life

All animals require salt to survive, and salt plays a crucial role in human health. It is the main source of sodium and chloride ions in the human diet. Sodium is essential for nerve and muscle function and is involved in the regulation of fluids in the body. Sodium also plays a role in control of blood pressure, while chloride ions play an important role in regulating blood pH and pressure. Chloride is also a crucial component in the production of stomach acid (HCl). Humans excrete salt when sweating and must replenish these lost sodium and chloride ions through their diet.

Wild mammals and birds also require salt, and those whose diet does not provide salt are known to congregate at natural mineral salt deposits.

Environmental Applications of Sodium Chloride Salt

Road Deicing: Sodium chloride is widely used as a deicing agent to prevent ice formation and improve road safety during winter. It is spread on roads and sidewalks to lower the freezing point of water, melting ice and preventing its formation.

Dust Control: Sodium chloride can be applied to control dust in various settings, such as at construction sites, on unpaved roads, and in mining operations. Spraying saltwater or applying solid salt helps to suppress dust particles and improve air quality in the surrounding areas.

Soil Stabilization: In certain construction projects, sodium chloride can be used for soil stabilization. It is mixed with soil or applied as a solution to enhance cohesion and reduce erosion. This technique is commonly employed in road construction, on embankments and slopes.

Brine Production: Sodium chloride is used to produce brine, a concentrated solution of salt in water. Brine has numerous applications in environmental processes, such as water treatment, industrial cooling, and food preservation. It is also used in the generation of electricity through brine-based geothermal power plants.

Snowmaking: In ski resorts and winter sports facilities, sodium chloride is used to make artificial snow. By mixing it with water and using snowmaking equipment, the freezing point of the water is lowered, resulting in the production of snow for recreational purposes.

Wildlife Management: Sodium chloride is sometimes used in wildlife management programs to control the population of certain animals. It is distributed strategically to deter animals from entering specific areas, protecting crops, and minimizing human-wildlife conflicts.

Sodium Chloride Salt in Agricultural Processes

Fertilizer: Sodium chloride can be used as a fertilizer in certain agricultural practices. It supplies essential nutrients to plants, including sodium and chlorine ions. However, it's important to note that sodium chloride is not a primary fertilizer and is generally used in specific cases where plants require these ions.

Livestock Feed: Sodium chloride is an important component of livestock feed. Animals, such as cattle, sheep, and goats, require sodium for proper bodily functions. Salt blocks or mineral mixes containing sodium chloride are provided to animals to fulfill their dietary sodium requirements.

Pest Control: Sodium chloride can act as a natural control agent against certain pests and weeds. Salt can be used as a desiccant, drying out and killing pests, such as slugs and snails. It can also be applied to areas with unwanted vegetation to inhibit growth.

Seed Treatment: Sodium chloride can be used as a seed treatment to control certain seed-borne diseases. It helps in preventing the transmission of pathogens from seeds to young plants, thus promoting healthy plant growth.

Hydroponics and Agriculture: Sodium chloride salt is used in controlled-environment agriculture, particularly in hydroponics systems. It is utilized to create nutrient solutions for growing plants without soil. However, it's worth noting that while sodium chloride can be beneficial in controlled amounts, excessive levels can be detrimental to plant health and growth.

Sodium Chloride Salt in Food and Culinary Applications

Seasoning and Flavour Enhancement: Salt is widely used as a primary seasoning ingredient to enhance the taste and flavour of dishes. It helps to bring out the natural flavours of ingredients, balances sweetness and acidity, and adds depth to savory dishes. Salt is used in a wide range of culinary preparations, including soups, sauces, marinades, dressings, rubs, and seasoning blends.

Preservation and Curing: Salt has long been used as a natural preservative. It helps to inhibit the growth of bacteria and other microorganisms, thereby extending the shelf life of various foods. Salt is used in curing processes for meats, such as bacon, ham, and salted fish, where it draws out moisture, prevents spoilage, and enhances the flavour and texture of the final product.

Baking and Yeast Activation: In baking, salt is essential for activating yeast and controlling fermentation. It strengthens gluten structure, improves dough elasticity, and enhances the texture and flavour of bread, pastries, and other baked goods. Salt is often used in bread dough, pizza dough, pretzels, and various baked desserts.

Brining and Pickling: Salt plays a vital role in brining and pickling processes. Brining involves soaking meat, poultry, or fish in a saltwater solution, which helps to retain moisture, improve tenderness, and add flavour before cooking. Pickling involves preserving vegetables and fruits by immersing them in a saltwater or vinegar solution, creating a tangy and preserved product.

Texture and Mouthfeel: Salt influences the texture and mouthfeel of food. It can enhance the perception of sweetness, balance bitterness, and suppress certain unpleasant flavours. Salt also

affects the tenderization of meat, promotes water retention in cooked vegetables, and contributes to the creaminess and smoothness of certain dairy products.

Fermentation and Fermented Foods: Salt plays a crucial role in the fermentation process of various foods, including sauerkraut, kimchi, pickles, and fermented condiments. It helps to create an environment that promotes beneficial bacteria growth while inhibiting the growth of harmful bacteria, leading to the production of flavourful and preserved foods.

Food Preservation and Safety: Salt is used in certain food preservation methods, such as curing and drying, to remove moisture and prevent microbial growth. It also acts as a natural antimicrobial agent, reducing the risk of foodborne illnesses in certain preserved foods.

Sodium Chloride Salt in Chemical Manufacturing

Chlor-Alkali Industry: Sodium chloride plays a crucial role in the chlor-alkali industry, which involves the production of chlorine, caustic soda (sodium hydroxide), and hydrogen. The process typically involves the following steps:

a. Electrolysis: Sodium chloride undergoes electrolysis, where it is dissolved in water, and an electric current is passed through it. This process leads to the decomposition of sodium chloride into chlorine gas (Cl_2) at the anode and hydrogen gas (H_2) at the cathode. Sodium hydroxide is simultaneously produced at the cathode.

b. Chlorine Production: Chlorine gas obtained during electrolysis has numerous applications, including the production of plastics, solvents, bleach, disinfectants, and PVC (polyvinyl chloride).

c. Sodium Hydroxide Production: Sodium hydroxide, also known as caustic soda, is a versatile chemical used in various industries. It finds applications in pulp and paper production, soap and detergent manufacturing, water treatment, aluminum production, and the production of various chemicals.

Petrochemical Industry: Sodium chloride is employed in the petrochemical industry as a catalyst and in various chemical reactions. It can be used in the following ways:

a. Catalyst: Sodium chloride acts as a catalyst in certain chemical reactions, such as the conversion of alcohols into alkyl chlorides.

b. Reaction Medium: Sodium chloride can act as a reaction medium or solvent in some chemical reactions, facilitating the dissolution and mixing of reactants.

Pharmaceutical and Medical Applications: Sodium chloride finds application in the pharmaceutical and medical fields due to its properties and physiological compatibility. Some notable uses include:

a. Saline Solution: Sodium chloride is a vital component of saline solutions used for intravenous drips, wound irrigation, and various medical procedures.

b. Hypertonic and Isotonic Solutions: Sodium chloride is used to prepare hypertonic and isotonic solutions that are utilized in medical treatments, nasal sprays, and eye drops.

c. Dialysate: Sodium chloride is used in dialysis to produce the dialysate. Dialysate is a sterile solution that closely mimics the composition of normal blood plasma. It contains various electrolytes, including sodium, chloride, bicarbonate, potassium, calcium, and

magnesium. Sodium chloride is used to provide the sodium and chloride ions necessary for maintaining the electrolyte balance during dialysis.

Dyeing and Textile Industry: Sodium chloride plays a role in the dyeing and textile industry in the following ways:

a. Dye Fixation: Sodium chloride assists in fixing dyes to fabrics during the dyeing process, enhancing colorfastness and improving the adherence of dyes to fibers.

b. Dye Bath Control: Sodium chloride helps control the dye bath's pH and temperature during dyeing operations, leading to consistent and reproducible results.

Sodium Chloride Salt in Water Treatment

Sodium chloride is used in water treatment for various purposes, primarily in the context of desalination processes and water softening.

Desalination Processes: Desalination is the process of removing salt and other impurities from seawater or brackish water to make it suitable for human consumption or industrial purposes. Sodium chloride is involved in two commonly used desalination methods:

a. Reverse Osmosis (RO): Sodium chloride is used to create a high-concentration saline solution known as brine. In the reverse osmosis process, water is forced through a semi-permeable membrane, leaving behind the salt and impurities. The brine generated during this process contains a high concentration of sodium chloride, which needs to be managed properly, often through disposal or further treatment.

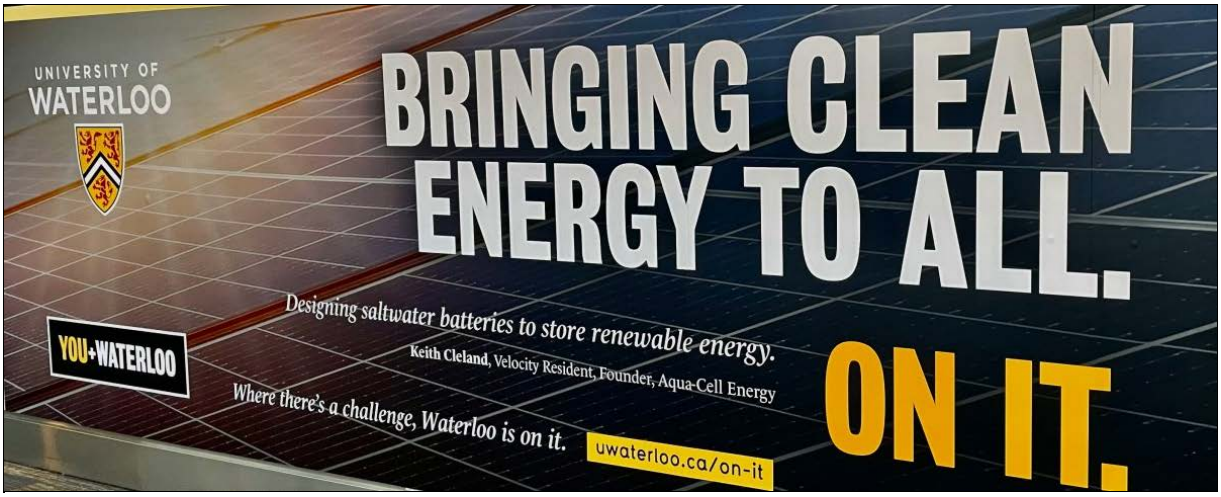
b. Electro-dialysis (ED) and Electro-dialysis Reversal (EDR): Sodium chloride is also used in ED and EDR processes, which involve the use of ion-exchange membranes to separate ions from water. Sodium chloride helps create the necessary conductivity in the water to facilitate the ion exchange and separation processes.

Water Softening: Water softening is the removal of "hard" ions, primarily calcium and magnesium, from water. Sodium chloride is used in a process called ion exchange, where sodium and chloride ions replace the hard ions which "softens" the water. This is typically done using a water softener device that contains a resin bed filled with tiny polystyrene beads coated with sodium ions. As hard water passes through the resin bed, calcium and magnesium ions are exchanged with sodium ions, resulting in softened water. Periodically, the resin bed is regenerated with a brine solution containing sodium chloride to recharge the resin with sodium ions.

Water softening is also critical at an industrial level. Industrial water softening is essential in industries where hard water can lead to scaling, reduced efficiency, and increased maintenance costs in equipment such as boilers, heat exchangers, cooling towers, and industrial processes that require high-quality water. Softening the water helps prevent mineral buildup, prolongs equipment lifespan, improves energy efficiency, and enhances the overall efficiency of industrial operations.

Pool Sanitation: Sodium chloride is used in saltwater chlorination systems for pool sanitation. These systems may use electrolysis to convert sodium chloride into chlorine, which then disinfects the pool water. Or in other cases, salt is added to pools in solid form as pucks which kills bacteria.

Sodium Chloride Salt in Emerging Technologies and Industry



Energy Storage: Sodium chloride salt is being explored for its potential use in energy storage systems. One example is the development of molten salt batteries, where sodium chloride-based molten salts serve as the electrolyte. These batteries have the potential to provide large-scale energy storage solutions, contributing to renewable energy integration and grid stabilization. Another example is sodium-ion batteries both solid and liquid for use in electric vehicles or for stationary batteries for storage. Companies currently developing salt-water batteries indicate that they store energy at less than 50 per cent the cost of lithium-ion battery technology. They have a temperature operating range of -30C to 40C and are 30 per cent more efficient than similar technologies.

Thermal Storage: Sodium chloride salt is utilized in thermal storage systems, particularly in concentrated solar power (CSP) plants. In CSP plants, solar energy is collected and stored as heat in molten salt, often a mixture of sodium chloride and other salts. This stored thermal energy can be used to generate electricity even when the sun is not shining, making it a viable option for renewable energy storage.

Chemical Synthesis: Sodium chloride salt is employed as a reactant or catalyst in various chemical reactions. It can contribute to the synthesis of specific compounds, such as organic chemicals, pharmaceuticals, and specialty chemicals.

Industrial Processes: Sodium chloride salt finds applications in various industrial processes. It can be used in manufacturing industries for metal refining, leather tanning, glass production, and as a flux in metallurgy.

Molten Sodium Chloride Salt in Nuclear Reactors

Sodium chloride-based molten salts have been investigated and used in certain types of advanced nuclear reactors known as molten salt reactors (MSRs). Molten salt is typically made by heating solid salts to high temperatures until they melt and become a liquid. The specific process of making molten salt can vary depending on the type of salt being used and the desired application.

Molten Salt Reactors (MSRs): MSRs are a type of nuclear reactor design that use liquid fuel in the form of a molten salt mixture. The fuel typically consists of a eutectic mixture of sodium chloride (NaCl) and fluorides, such as lithium fluoride (LiF) and beryllium fluoride (BeF2). This fuel mixture is commonly referred to as a "sodium chloride-based molten salt" or "flibe" (a combination of LiF and BeF2).

Coolant and Fuel Medium: In MSRs, the sodium chloride-based molten salt serves multiple functions. It acts as both the coolant and the fuel medium. The fuel salt circulates through the

reactor core, transferring heat generated by nuclear fission reactions to external systems for power generation. The molten salt's excellent heat transfer properties make it an effective coolant, helping maintain optimal reactor temperatures.

Neutron Moderation: The sodium chloride-based molten salt also plays a role in moderating the neutrons produced during the nuclear fission process. By incorporating certain isotopes into the molten salt, such as lithium-6 (6Li), which has a high neutron absorption cross-section, it can help control the neutron energy spectrum within the reactor core.

Safety Features: Sodium chloride-based molten salts offer inherent safety features in MSRs. For instance, at elevated temperatures, these salts have a high boiling point and low vapor pressure, reducing the risk of coolant loss due to evaporation. Additionally, the fuel salt's ability to expand when heated can act as a negative temperature coefficient, automatically limiting reactivity and reducing the risk of runaway reactions.

Environmental Concerns with the Use of Sodium Chloride Salt

Water Contamination: One of the main environmental concerns related to sodium chloride is its impact on water sources. Salt runoff from deicing activities, irrigation practices, and excessive use of sodium chloride-based fertilizers can find its way into rivers, lakes, and groundwater. Elevated salt concentrations in freshwater ecosystems can harm aquatic organisms, disrupt their natural habitats, and affect water quality.

Soil Salinization: Overuse of sodium chloride as a soil amendment or irrigation agent can lead to soil salinization. Salinization occurs when the salt content in the soil increases, negatively affecting soil structure and reducing fertility. High salt levels hinder plant growth, reduce crop yields, and limit the diversity of plant species in affected areas.

Vegetation Damage: Sodium chloride can harm plants and vegetation if applied in excessive amounts or in sensitive environments. Salt accumulation in the soil can dehydrate plants by drawing water away from their roots. This osmotic stress can lead to plant wilting, leaf burn, and, in severe cases, plant death. Salt spray from roads treated with deicing agents can also cause damage to roadside vegetation.

Impact on Wildlife: Sodium chloride can pose risks to wildlife when present in high concentrations. Birds, mammals, and amphibians may ingest salt pellets or contaminated water, leading to health issues and disrupted osmoregulation. Additionally, salt-contaminated freshwater sources can negatively impact aquatic organisms, including fish, invertebrates, and amphibians.

Corrosion and Infrastructure Damage: Sodium chloride is known for its corrosive properties, which can affect infrastructure such as bridges, roads, vehicles, and pipelines. The corrosive nature of salt can accelerate the deterioration of metals and concrete, leading to increased maintenance costs and potential safety hazards.

In Conclusion

In conclusion, sodium chloride salt is a critical mineral for the functioning of modern society, shows great potential for the future and poses environmental concerns if not handled and disposed of properly. Such a critical and potentially dangerous resource and those who extract and process it should not be subject to the whims of foreign cartels and instead should be defended and protected by governments at all levels.