







When a well finishes producing oil and gas, usually after about 20 years, the last stage of a well's lifecycle begins. This step is called reclamation.

Kisik Environmental Services, a TSAG venture company, formed a joint venture with Solstice Environmental Management in 2021 to complete a Site Rehabilitation Program (SRP) for an oil and gas site closure on behalf of Louis Bull Tribe. The first community plan for the SRP included:

- Surface equipment removal
- Pipeline abandonment
- Downhole well abandonments
- Phase I Environmental Site Assessments (ESA)

The next community plan will include phase II ESA's, remediation, and reclamation.

An ESA is a process that investigates the likelihood of contaminants in the biophysical parts of the environment (i.e., land, air, and water) through the food chain to human receptors. There are various phases for ESA's. Phase I is

essentially a preliminary investigation that looks at things like past and current land use on a particular site which determines the need for further evaluation. Phase II involves intrusive sampling of the land, air, or water to determine the presence of contaminants.



Land remediation refers to the process of reversing or containing pollution in the environment. During remediation, polluted or contaminated soil, sediment, surface water, or groundwater is removed to reduce the environmental impact.

Reclamation involves physical reconstruction of soils and terrain to its former or other productive uses. In other words, it is a method of turning waste land into good land for residential, social, commercial, or industrial purposes. This involves the removal of structures and decontamination and land surface reconstruction such as contouring, soil replacement, and revegetation.

Alberta has developed a national reputation for its environmental regulatory structure. Site abandonment and reclamation work in Alberta's aging oil and gas fields has resulted in over 62 thousand reclamation certificates being issued. However, the pace of reclamation has not kept up with levels of development. At the end of 2010, there were more than 47 thousand abandoned and uncertified wells in Alberta. Between 1963 and 2010, more than 350 thousand wells were drilled in Alberta. Ultimately, Alberta's growing population — requiring more housing, food, and water — together with increasing climate crisis events, will see an increased demand for land reclamation in the very near future.



Zero Waste Ambassador Program

TSAG has supported the delivery of a Zero Waste Ambassador Program at three First Nations schools for the 2021-22 school year. They are: Chief Jacob Memorial School, Nakoda Elementary School, and Big Belly Middle School. The program includes five modules with activities and lessons for students to learn about environmental stewardship through waste reduction. Elizabeth Romo Rabago, an Environmental Practitioner and Impact Entrepreneur, has been developing and delivering the Zero Waste Ambassador Program and is currently wrapping up the final modules for this school year which include, vermicomposting, gardening, and a waste audited.

In vermicomposting, students learn about how worms can break down food for waste into high quality nutrients for plants and interact with the worms to see them in action. For the gardening module, students made their own planters to plant wildflowers using soil and compost made by the worms, helping them understand the importance of plants, wildlife, and the joys of gardening. For the last module, waste auditing was completed by Elizabeth with the help of the students to measure the amount of waste produced in the classroom. This helped the students understand more about the waste they produce, and they were able to compare their results to those at the beginning of the school year (before they had begun diverting waste through vermicompostina).

We want to thank Elizabeth for all he fantastic work with the Zero Waste Ambassadors Program, and congratulate all the students who participated this school year!

Gardening module







Vermicomposting module







ACRS Courses Now Open for Registration!

We're partnering with Olds College to offer two Gravel Road Maintenance Grader Training courses this August The first course takes place August 16-18th 2022, and the second is August 30-September 1st, 2022. We are also pleased to be offering Mixed Heavy Equipment Training, which is taking place August 22-26th, 2022 at Olds College as well. These comprehensive courses are first-come-first-served and registration will fill up quickly! Please keep in mind that only one participant from each individual First Nation will have their costs reimbursed. Any additional participants will be put on a wait list and will be enrolled if a spot becomes available. More information on the experience and tools required for these courses can be found on our social media or through the following links:

GRAVEL ROAD MAINTENANCE AUGUST 16,17,18 GRAVEL ROAD MAINTENANCE AUG/SEP 30,31,1 MIXED HEAVY EQUIPMENT TRAINING AUGUST 22,23,24,25,26



Burn, Baby, Burn

Campfires should be started WITHOUT the use of gasoline. Fire starters such as crumpled paper and a match are safer to use and don't endanger you or the surrounding environment like gasoline would. Ensure that you are always tending to your fire once started. Fires should never be left unattended.

Circle up for Safety

Donna Strachan, one of our Fire Field Officers, has many more resources for campfire safety. After teaching fire safety for more than 25 years, Donna is passionate about keeping people safe around fires.

"Build your campfire with the safety circle," Donna tells us, referring to the practice of drawing approximately a four foot circle around the fire (1-2 metres on each side) to prevent burn injuries and especially to protect children.

Finale

When it's time to put your fire out, be sure you're soaking it thoroughly with water, covering the logs and embers, stirring, and adding more water until everything is cool to the touch. Campfires are fun if handled safety. Donna shares her parting thoughts with us on campfire safety:

"Bring people together, spark new ideas, kindle strong friendships, radiate warmth, no smoking, be a good storyteller, and don't go to bed fired up."





We ran our very first social media giveaway this month and had lots of engagement from our community! We want to thank everyone who commented on our post to enter our giveaway, it was lovely to hear what you all are looking forward to this summer.

Sarah Cole was our giveaway winner and she will be receiving her prize in the mail. We hope to have more fun giveaways in the future, so be sure to be following us on Facebook, Instagram, Twitter, TikTok, and LinkedIn!









