



# Environmental Audit Final Report

December 10, 2019

## Summary

In 2018 Wheatland County hired a third-party auditor to complete an Environmental Audit of Wheatland County operations. Wheatland County staff accompanied the auditors on site visits conducted during May and June 2018, and a final report was provided in August 2018. The audit report outlined 48 total findings, of which 31 were considered regulatory non-compliance and classified according to level of risk. 17 findings consisted of non-regulatory opportunities for improvement. Throughout 2019 Wheatland County staff endeavoured to address and correct the findings, and Council was provided with quarterly progress updates in April, July and October. In this final report administration is pleased to announce that we have achieved 90% success in correction of audit findings and have committed ongoing attention to the remaining 10% as part of our regular programs. These items are identified and explained in the figures to follow alongside descriptions of improvements achieved at Wheatland County as a result of the environmental audit initiative.

## Completion Results

Figure 1: Non-Compliance Findings

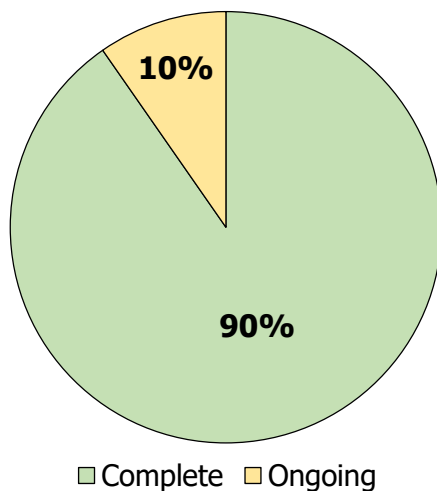


Figure 2: Opportunities for Improvement

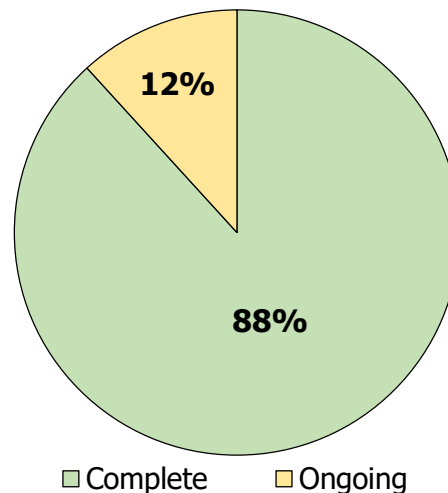


Table 1: Completion Data

Status	Non-Compliance High Risk	Non-Compliance Moderate Risk	Non-Compliance Low Risk	Total Non- Compliance	Total Opp. for Improvement	Total
Complete	3	9	16	28	15	43
Ongoing	1	2	0	3	2	5
Total	4	11	16	31	17	48
% Complete	75%	82%	100%	90%	88%	90%

Table 2: Final Status of Non-Compliance Findings

From 2018 Wheatland County Environmental Compliance Audit, Table 2 <b>Non-Compliance Findings</b>				
<b>Item No. (Risk)</b>	<b>Operational Area</b>	<b>Topic</b>	<b>Action Taken</b>	<b>Item Status</b>
1 (Low)	All	TDG – training	All applicable staff have received TDG training, and a Wheatland County staff member has now been trained as a TDG instructor for future training needs.	Complete
2 (Low)	Agricultural Services	Pesticide records	Pesticide record forms were modified to include the name of pest and purpose for applying pesticides.	Complete
3 (Low)	Agricultural Services	Pesticide Mixing - Offsite	Pesticide mixing procedures have been completed for every satellite shop in the County.	Complete
4 (Low)	Agricultural Services	Pesticide applicators and dispensers	Agricultural Services notified AEP of changes to pesticide applicators on staff and will continue to do so moving forward.	Complete
5 (Mod)	Public Works	Freshwater Pond	Staff confirmed that no water license is required for use of water from the dugout in the center of the County yard. Uses of the water and activities potentially influencing water quality were identified. Due to the likelihood of interaction with groundwater, staff found alternate locations for snow piling away from the dugout and advocated for the building of a wash bay to reduce wash runoff into the dugout. Signs were purchased and installed around the dugout to remind staff to avoid activities that impact water quality. Staff have recently had the water tested to establish a benchmark and did not find hydrocarbon contaminants in the water. Staff will look for ongoing improvement opportunities.	Complete
6 (Low)	Public Works	Tidy tank - placarding	New TDG placards were ordered and installed on the one tank that was found to be lacking them.	Complete
7 (Low)	Public Works	WHMIS labeling	Staff placed WHMIS workplace labels on the two containers found to be lacking them, and staff will take care to look for unlabelled containers in all future safety inspections.	Complete
8 (Mod)	Public Works	Fueling Tanks – spill control	Spill kits were ordered for one grader shop fuel tank found to be lacking them, and staff confirmed that enough spill materials and equipment were available in the main yard to accommodate a spill of at least 1000 L.	Complete

9 (Low)	Public Works	Waste management – oily rags and solvents	Steel containers with steel lids were purchased for all shops for the collection of oily rags and spill absorbent materials.	Complete
10 (Mod)	Public Works	Fueling tanks - spill	A leak noticed at the diesel tank in the yard at time of inspection was fixed immediately. Stained soil was noticed at a grader shop and in the County yard in the fueling tank areas; however, staff confirmed that the tanks sit on clay pads where runoff does not risk leaving the site. Soil will be remediated as required if/when sites are retired.	Complete
11 (Mod)	Public Works, Waste and Recycling, Utilities	Tank secondary containment monitoring	The staff member responsible for secondary containment monitoring was not available at the time of the audit. Secondary containment monitoring had been completed and will continue to be for all sites with fuel or oil tanks, and records will be kept available.	Complete
12 (Mod)	Roads	Nest sweeps	Nest sweeps have been incorporated into our road and infrastructure maintenance programs to ensure that our activities do not harm species at risk or migratory birds. In 2018 and 2019 nest sweeps were completed at every road construction site prior to the removal of vegetation within restricted activity periods. Nests found were respected on the job. Moving forward, staff intend to remove vegetation prior to restricted activity periods wherever possible to prevent operation impacts and reduce costs.	Complete
13 (Low)	Roads	Weed issues	At one of the road construction sites visited during the audit, a Black Henbane infestation had taken root following ground disturbance. Staff were already aware of Black Henbane issues in the area, and immediately following the audit all plants were controlled. This location will require ongoing attention.	Complete
14 (High)	Roads	Erosion and sediment control (ESC)	Heavy flooding in the spring of 2018 lead to substantial erosion and sediment issues at some of our recent road projects, highlighting deficiencies in our erosion and sediment controls. Conversation with the road construction team and consultants lead to increases in quality of erosion and sediment control plans on every project moving forward. Contractors were hired to correct issues on roads that were heavily impacted by flooding, and there has been a substantial increase in erosion and sediment controls used on 2018 and 2019 projects. Staff ensure that seeding is completed as soon as possible following project completion to establish vegetative cover quickly and help keep costs down. 8 staff members attended erosion and sediment control training in the spring of 2019 the highlighted the importance of effective ESC and proper methods of installation.	Complete

15 (Low)	Utilities	Annual reporting	Staff ensured that annual reports for the Carseland-Speargrass wastewater system will now include groundwater level monitoring results and an operational summary of activities.	Complete
16 (Mod)	Utilities	In-stream objectives	In-stream monitoring at the Carseland-Speargrass water treatment plant is dependent on provincial monitoring infrastructure which was damaged during flooding and therefore not utilized thereafter by staff. The expectation is that river flow rates will be documented daily during water diversion to ensure that the requirements of our water license are met. We anticipate that this monitoring will occur in 2020 but will require ongoing attention dependent on utility contractors to ensure this requirement is being met.	Ongoing
17 (Low)	Utilities	Monthly reporting	Monthly reports at the Carseland-Speargrass Water Treatment Plant were reviewed and moving forward will contain all necessary reporting requirements.	Complete
18 (Low)	Utilities	Diesel tank - identification	Product label and TDG placards were purchased and added to all diesel tanks at water treatment plant locations.	Complete
19 (High)	Utilities	Water Act Licence	The County yard has a water well that supplies all buildings at the site. Exceedance of its water license will need to be addressed if it becomes an annual issue, which would require obtaining an additional license or modifying how water is used at the complex. Staff have recently identified operations that can alternatively utilize water from the onsite dugout and will continue to monitor annual use. Other opportunities for reduction in water consumption will be considered.	Ongoing
20 (High)	Utilities	Potable Water	Wheatland Regional Corporation tests the County site well water bacteriologically once per week and chemically a few times per year for potability. Testing has consistently proven potable water.	Complete
21 (Low)	Utilities	EPEA approval or registration	There were questions as to whether the Rosebud Water Treatment Plant had appropriate approval, staff have since confirmed that the lagoon is approved. Annual reporting was corrected in 2019 and will be correct moving forward.	Complete
22 (High)	Utilities	Water licence expiration	Additional water licensing for Rosebud was deemed to not be required due to planning for Phase III Expansion of the Wheatland Regional Corporation Water Line.	Complete
23 (Low)	Utilities	Monthly reporting	The name and manufacturer of water treatment additives have and will continue to be included in monthly reports from the date of this audit.	Complete

24 (Low)	Utilities	Approved laboratory	Staff further researched this finding and found that we were compliant with the requirements for approved laboratories for water testing. Certain aspects of approval do not apply to day-to-day activities, and all operators are trained and hold appropriate certification. Laboratories have been approved by provincial inspectors.	Complete
25 (Mod)	Utilities	Water use reporting	The audit found that water use reports had not been submitted for some years at three sites. After research, it was found that we are compliant at two of the sites as the submission of reports was not required, but the third will require more time to complete dependent on utility contractors. Staff will ensure that any required annual reports are submitted on an ongoing basis.	Ongoing
26 (Mod)	Waste and Recycling	Spill response materials	Spill kits were ordered for one waste transfer site that was found to be lacking them.	Complete
27 (Mod)	Waste and Recycling	Personal Identification Number	Staff researched this finding and found that we do not require a hazardous waste PIN. PIN numbers are held by our waste carriers and recipients.	Complete
28 (Mod)	Waste and Recycling	Used oil jug storage – soil staining	An option for containment of used oil pail and drum storage has been approved by Drumheller and District Solid Waste Association. Installation will be done on a site-by-site basis with all sites intended to be complete by 2021.	Complete
29 (Low)	Waste and Recycling	Transtor bins - hydraulic leaks	Wheatland County is ordering and installing a type of hydraulic connector on the Waste Transtor bins that should alleviate the issue of leakage. A trial will be completed at one site, with the rest of the sites intended to follow.	Complete
30 (Low)	Waste and Recycling	Hazardous waste bins - labelling	All hazardous waste collection bins at waste transfer sites have been labelled.	Complete
31 (Mod)	Waste and Recycling, Public Works	Waste manifests	Copies of all waste manifests are now being retained and filed for a period of two years.	Complete

Table 3: Final Status of Opportunities for Improvement

From 2018 Wheatland County Environmental Compliance Audit, Table 3 <b>Opportunities for Improvement</b>				
<b>Item No.</b>	<b>Operational Area</b>	<b>Topic</b>	<b>Action Taken</b>	<b>Item Status</b>
1	All	Records management	The Audit noted that records requested for review were not immediately available. In many cases they were kept in hard copy, held by consultants, or kept electronically by various staff. This record management challenge is part of a greater, ongoing project at Wheatland County that is already underway. More work will be required on an ongoing basis to establish an appropriate process for obtaining and filing all types of records required for environmental compliance.	Ongoing
2	Public Works	Oilfield tanks - soil staining	Staff inspected the site identified and determined that staining is not at risk of contaminating the environment or migrating off the property. Soil will be remediated as required if/when the site is retired.	Complete
3	Public Works	Fueling tanks – signage	Signage was added to all sides of the fuel tanks in the yard.	Complete
4	Public Works	Contaminated spill materials	Steel containers with steel lids were purchased for all shops for the collection of oily rags and spill absorbent materials.	Complete
5	Public Works	Site plan	Wording on one of our gravel pit site surveys was changed for clarity.	Complete
6	Public Works	Mobile equipment – spill kits	More spill kits were added to locations with hazardous materials and staff ensured that spills kits were available in all vehicles and equipment hauling materials.	Complete
7	Public Works	Soil stockpile - additional soil	At the time of audit, a slurry pit had just been dug next to the topsoil pile in the County yard, causing soil to be added to the pile. We were cautioned to avoid mixing soils from various sites into one pile, so even though this had not actually occurred, the reminder was passed on to staff.	Complete
8	Public Works	Erosion	Erosion issues were noted along the banks of Severn Reservoir. After research, it is determined that this is a matter for the Province as owners of the reservoir. In the past, staff have attempted to create shoreline restoration projects, but have been reminded by the Province that it is not our responsibility to do so.	Complete

9	Public Works	Soil stockpile - signage	Signs indicating topsoil and subsoil stockpiles were added to stockpile and gravel pit locations to ensure that piles can be identified properly in the future.	Complete
10	Roads	Records management	Staff implemented a collaborative management system as a pilot for the road construction program so that all staff involved would have access to documents and correspondence produced by consultants. Although more work is required to ensure ongoing improvement to records management in this area, a framework has been set.	Complete
11	Utilities	Water loss in distribution system	Staff found and fixed leaks in the Carseland water distribution system, resulting in an estimated 40% water savings in the system.	Complete
12	Utilities	Spill materials	Spill kits were added inside a water treatment plant where they were found to be lacking.	Complete
13	Utilities	Well locks	A lock was installed on one Rosebud water wellhead that was lacking.	Complete
14	Utilities	Water withdrawal volumes	New water flow monitoring equipment was installed at the Rosebud Water Treatment Plant to ensure more accurate readings and reporting.	Complete
15	Utilities	Measurement units	Staff reviewed and added units of measure to all reports and will continue to do so moving forward.	Complete
16	Waste and Recycling	EPEA notifications	Staff reviewed and determined that the current arrangement regarding waste transfer sites is accurate with AEP and the Environmental Protection and Enhancement Act. The situation is complicated due to ownership and management of waste transfer site lands, leading to this finding on the audit.	Complete
17	Waste and Recycling	Pesticide jug storage area	Pesticide container collection sites are a noted issue amongst staff. Ongoing work is required to establish a plan for upgrading the sites. The situation is complicated due to involvement of Cleanfarms and possible need for a capital solution, which may be a longer-term priority. Collection sites have clay pads and deteriorating berms, so are okay for the time-being. Staff have considered supplying plastic bags for collection so that liquids are contained, or amalgamating and reconstructing collection infrastructure, but no concrete plan has yet been determined.	Ongoing