

Wastewater Treatment

BIOSOLIDS PRODUCTION REPORT

Capital Regional District | December 2025

Long-Term Biosolids Management Strategy

In June 2024, the CRD Board approved the long-term biosolids management strategy. The options in the long-term strategy follow a tiered prioritization structure. More information on the CRD’s long-term biosolids management strategy can be found [here](#).

Summary of Biosolids Production and End Use

In December, 330 tonnes of biosolids produced at the Residuals Treatment Facility (RTF) were shipped to the Cassidy quarry, for use in land reclamation. No biosolids were landfilled.

Biosolids production and end use data for December 2025 is as follows:

| Biosolids Type | Produced | | Tier 1 ^b | Tier 2 | | | Tier 3 ^f | Hartland Landfill ^g |
|-------------------------------|--------------|---------|---------------------|-------------------------|-------------------------------|--|---------------------|--------------------------------|
| | | | N/A | Combustion ^c | Land Reclamation ^d | Non-Agricultural Soil Amendment ^e | N/A | |
| Dried ^a Class A | This month | 330 t | 0 t | 0 t | 330 t | 0 t | 0 t | 0 t |
| | Year to date | 3,273 t | 0 t | 249 t | 2,812 t | 212 t | 0 t | 0 t |
| Non-Class A | This month | 0 t | X | | | | | 0 t |
| | Year to date | 0 t | | | | | | 0 t |

^a Greater than 90% solids.

^b Tier 1 advanced thermal option under development.

^c Used as an alternative fuel at the Amrize facility in Richmond, BC, or trialed in other waste-to-energy facilities.

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^d Used for quarry reclamation in Cassidy, BC.

^e Used to fabricate growing medium and as a fertilizer at non-agricultural nurseries in the Fraser Valley.

^f No Tier 3 contingency options currently available.

^g Class A Biosolids are rendered inert by mixing with soil and landfilled within leachate containment areas, and Non-Class A Biosolids are landfilled as a controlled waste

Compliance Monitoring

The CRD's contractor, Hartland Resource Management Group (HRMG), tests biosolids produced at the RTF to ensure the biosolids are Class A, as defined by the British Columbia *Organic Matter Recycling Regulation* (OMRR). Testing is performed by CARO Analytical Services. OMRR specifies that for Class A biosolids, metals concentrations must not exceed "those specified in Trade Memorandum T-4-93 (September 1997), Standards for Metals in Fertilizers and Supplements, as amended from time to time." The latest version of OMRR can be found [here](#) and the latest version of Trade Memorandum T-4-93 can be found [here](#). In June 2022, The Ministry of Environment and Climate Change Strategy announced the intention to amend OMRR, including new standards for Class A biosolids. The proposed OMRR Standards have been included in the table for reference. All biosolids met OMRR Class A criteria.

| Substance | OMRR Standard ^a (mg/kg dry weight) | Proposed OMRR Standard ^b (mg/kg dry weight) | Biosolids (mg/kg dry weight) | | |
|---------------|--|---|------------------------------|---------|---------|
| | | | Average | Minimum | Maximum |
| Metals | | | | | |
| Arsenic (As) | 666 | 41 | 2.28 | 1.99 | 2.91 |
| Cadmium (Cd) | 177 | 15 | 1.24 | 1.19 | 1.30 |
| Chromium (Cr) | 9,333 | 1000 | 45.4 | 42.0 | 53.6 |

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| | | | | | |
|------------------------|--------|------|-------|-------|-------|
| Cobalt (Co) | 1,333 | 150 | 3.85 | 3.61 | 4.47 |
| Copper (Cu) | 6,666 | 1500 | 401 | 380 | 421 |
| Mercury (Hg) | 44 | 4 | 0.458 | 0.420 | 0.510 |
| Molybdenum (Mo) | 177 | 20 | 8.04 | 7.73 | 8.78 |
| Nickel (Ni) | 1,600 | 180 | 20.0 | 19.1 | 23.3 |
| Lead (Pb) | 4,444 | 300 | 30.6 | 28.6 | 34.4 |
| Selenium (Se) | 124 | 25 | 5.32 | 5.01 | 5.49 |
| Thallium (Tl) | 44 | ns | <0.10 | <0.10 | <0.10 |
| Vanadium (V) | 5,777 | ns | 19.9 | 18.2 | 24.4 |
| Zinc (Zn) | 16,444 | 1820 | 790 | 761 | 813 |
| Fecal Coliforms | | | | | |
| MPN | 1,000 | 1000 | <3.0 | <3.0 | <3.0 |

^a For metals, the maximum allowable concentrations for Class A biosolids are calculated based on a 500 kg/ha annual application rate; for fecal coliforms, the maximum allowable concentration is a fixed value

^b Proposed OMRR standards are tabled for reference - standards subject to change once final OMRR amendment is published.

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On October 18, 2024, the Canadian Food Inspection Agency (CFIA) began enforcing an interim standard for per-fluorooctane sulfonate (PFOS) in biosolids imported or sold in Canada as fertilizers. PFOS is used as an indicator for per- and polyfluoroalkyl substances (PFAS). The notice to industry is available [here](#). The CRD tests biosolids produced at the RTF bi-annually to ensure biosolids are compliant with this standard. The most recent sample was taken August 28, 2025. Testing is performed by SGS AXYS Analytical Services.

| Substance | CFIA Interim standard ($\mu\text{g}/\text{kg}$ dry weight) | Biosolids ($\mu\text{g}/\text{kg}$ dry weight) |
|-----------|---|---|
| PFOS | 50 | 2.28 |