

Supplier/Contractor Application Form

New Soil and Material Stabilization Product

Applicant name:	Application date:
Business name:	Product name:

For more information on the content of this form as well as definitions and instructions, please refer to Section 2.3 of TAC's Guide to Evaluating Soil and Material Stabilization Products.

Part A – Category of stabilization (select one: complete an additional form for each additional category)

Mechanical

- Compaction Aggregate piers Grouting - compaction, jet, chemical **Rigid inclusions** Blending Other: (please specify) Geosynthetics Semi rigid inclusions Geogrid Shallow mixing Geopile Deep soil mixing Geocell Controlled modulus columns Cementitious Cement (GU, GUL, blended Cement blended with Cement kiln dust cement) supplemental cementitious Other: (please specify) materials (SCM) Lime and guick lime Blast furnace slag Fly ash Asphalt Cutback or liquid asphalt Asphalt emulsion Other: (please specify) stabilization Foamed asphalt **Other Chemical Stabilization** Chlorides Synthetic polymer emulsions Nanotechnologies Organic non-petroleum / Sulfonated oils Other: (please specify) natural polymers Synthetic oils Petroleum resins Enzymes Part B – Layer(s) to be stabilized Min. depth Max. depth Standard subgrade soils (mm) (mm) STABILIZED SUBGRADE Low-quality subgrades (materials that would otherwise be subexcavated) SUBGRADE Imported new aggregate base/subbase Max. depth

 - Existing aggregate base/subbase
 - Pulverized/blended base and subgrade
 - Imported new RAP Material
 - Pulverized/Milled RAP Material
 - Pulverized RAP/granular material
 - Imported new RAP/granular material



GRANULAR SUBBASE

(mm)

(mm)



Is the stabilized material able to sustain public traffic?

- □ Yes for a short term during construction, but the material needs a permanent surfacing
- davs of curing, no permanent surface required Yes – after
- □ Yes immediately, with no curing required
- No the stabilized material should be protected from traffic until it can be permanently surfaced

Additional comments on the layer(s) that can be stabilized:

Part C – Stabilized material properties and use

What types of benefit(s) does your product provide? (select all that apply; provide references to substantiate each)

- Lower moisture content (dry out area)
- Decreased plasticity index
- □ Improved subgrade strength
- Improved resistance to erosion and/or leaching
- Long-term durability

- Binds gap graded material together
- Decrease in granular layer thickness required in design
- Improved granular laver strength
- Improved strength of asphalt/surface layer
- Other: (please specify)

With which soil/material condition(s) is the product suitable for use? (select all that apply)

- □ High sulphate content
- □ Low-strength fine-grained soil □ High organic matter content
- □ High moisture content
- High plasticity index
- Peat
- □ Soil gradation issues
- □ Low-strength coarse-grained soil □ Differential settlement
- Frost-susceptible material
- Swelling/heaving material Permafrost Liquefiable soils Other: (please specify)

Please identify the climatic condition(s) for which the product is suitable:

Please identify the time of year the stabilization can be completed:

The stabilized material is suitable for the following traffic levels: (select all that apply)

- < 0.3 million ESALs</p>
- □ 0.3 to 3 million ESALs
- □ 3 to 10 million ESALs
- □ 10 to 30 million ESALs
- Unrestricted traffic
- Heavy duty pavements (e.g. airports, ports, intermodal yards, container facilities)



The product has the following known limitations for use: (attach references for any projects that did not work well and the reasons for performance problems, in order to prevent failure of the product to perform)

- □ Climate/environment
- Type of soil
- □ Long-term performance
- Other: (please specify)
- No known limitations for the product

Environmental risks and benefits:

- Detailed information regarding environmental risks of the product is attached to this application
- If no information regarding environmental risks is attached to this application, then a signed declaration stating that there are no known environmental risks is attached to this application
- Detailed information is attached to this application regarding environmental benefits to using this product

Health and safety information: (identify any known health and safety issues with the product)

- Carcinogen
- Signed declaration indicating no carcinogenic products
- Material Safety Data Sheet (MSDS) is attached to this application
- \square PM₁₀ and PM_{2.5}
- Other: (please specify)
- No known health and safety issues

Part D – Stabilized material performance information

Design life

- The design life of the stabilized material is years
- The stabilized material has the same life span as standard materials
 - If not, state the difference (in years) : More _____ or less _____

Describe required maintenance for the stabilized material, and compare it to standard pavement materials:

Other applications and approvals:

- An application involving this form has been completed in another jurisdiction (*name*):
- An approval involving this form has been given in another jurisdiction (*name*):
- - → Duration of use in that jurisdiction (years):

Research that has been completed on the product: (select all that apply)

- In-house research
- University research
- Agency research
- Third-party research
- Published research
- Copies of research are attached

Project examples and references (direct experience): (select all that apply)

- A list of projects the product has been used on is attached, including contact names in government or private business that can verify claims
- □ Reference projects are based in Canada
- Reference projects have similar climatic conditions to the area where approval is sought
- Test section information is attached (if available)
- Long-term performance data is available for my product (attach if available)

Product is otherwise approved for in use in another jurisdiction (*name a comparable one*):



Part E – Commercial considerations

Proprietary product:

- Yes, the product is proprietary
 - → If there is a market equivalent, please identify it for comparison purposes: _____
- □ No, the product is not proprietary

Describe how the stabilization product is supplied to the project (e.g. container, packaging):

Describe how the stabilization product is incorporated into the project (i.e. equipment and techniques):

Availability: (select all that apply)

- Stabilization product is available for purchase locally
 - → Address of nearest supplier: ______

Equipment required for production (plant, material surface distribution, in-situ distribution) is available locally

→ Address of nearest producer: _____

- Specialized labour is needed for this process and is locally available
- If the product, equipment and/or labour are not available locally, please advise on the current mobilization distance (km) required to complete a trial:
 - Product: _____ Equipment: _____ Labour: _____

Cost information has been provided: (select all that apply)

- □ For the product
- □ For production and placement
- □ For the material life-cycle

Part F – Other considerations