Wisconsin Department of Administration
Division of Executive Budget and Finance

Fiscal Estimate - 2015 Session

☒ Original ☐ Updated ☐ Corrected ☐ Supplemental

LRB Number **15-3924/1**	Introduction Number **AB-0634**

Description
Regulating and monitoring airborne particulate matter and respirable silica and granting rule-making authority

Fiscal Effect

State:

☐ No State Fiscal Effect
☐ Indeterminate
- ☐ Increase Existing Appropriations
- ☐ Decrease Existing Appropriations
- ☐ Create New Appropriations
- ☐ Increase Existing Revenues
- ☐ Decrease Existing Revenues
- ☒ Increase Costs - May be possible to absorb within agency's budget ☐ Yes ☒ No
- ☐ Decrease Costs

Local:

☐ No Local Government Costs
☐ Indeterminate
1. ☐ Increase Costs ☐ Permissive ☐ Mandatory
2. ☐ Decrease Costs ☐ Permissive ☐ Mandatory
3. ☐ Increase Revenue ☐ Permissive ☐ Mandatory
4. ☐ Decrease Revenue ☐ Permissive ☐ Mandatory
5. Types of Local Government Units Affected
   - ☐ Towns ☐ Village ☐ Cities
   - ☐ Counties ☐ Others
   - ☐ School Districts ☐ WTCS Districts

Fund Sources Affected **Affected Ch. 20 Appropriations**

☐ GPR ☐ FED ☐ PRO ☐ PRS ☒ SEG ☐ SEGS 20.370 (2)(mq)

Agency/Prepared By	Authorized Signature	Date
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Fiscal Estimate Narratives

DNR 2/8/2016

LRB Number **15-3924/1**	Introduction Number **AB-0634**	Estimate Type **Original**
Description Regulating and monitoring airborne particulate matter and respirable silica and granting rule-making authority		

Assumptions Used in Arriving at Fiscal Estimate

The bill requires an owner or operator of an industrial sand mining or processing facility to monitor the ambient air near the facility for small crystalline silica particles and other particulate matter and report the results to the Department of Natural Resources (DNR). This bill also requires DNR to promulgate an ambient air quality standard for small crystalline silica particles. Under current law, DNR may promulgate an ambient air quality standard for an air contaminant for which a standard has not been promulgated under the federal Clean Air Act, but only if certain conditions are met. Silica is not a contaminant for which a standard has been promulgated under the federal Clean Air Act. This bill allows DNR to promulgate an ambient air quality standard for crystalline silica without meeting the conditions required under current law.

I. Assumptions

For this estimate, most calculations assume 75 sites, which is the current active facility count number. This will change over time, as more industrial sand operations are added.

The bill requires no fewer than 2 monitors. In practicality, this is 2 monitors per pollutant, as each compound (PM10, crystalline silica, PM2.5) would need to be monitored by a different instrument. There are some dichotomous samplers that can measure PM10 and PM2.5 in one, but it was not assumed that a facility would want to operate a dichotomous sampler because they are more complex to operate.

II. Fiscal Impact

1. Development of a standard - The bill directs DNR to promulgate an ambient air quality standard and increments for crystalline silica. Development of a standard requires the following:

a. scientific research to understand the health impacts of crystalline silica in order to determine a health based standard; there is currently no known scientific research regarding crystalline silica increments (assumes 1000 hours total)

b. literature review of existing reference levels (in other states) and how they were determined; there is currently no known literature regarding crystalline silica increments (standard or reference level) (assumes 1000 hours total)

c. corresponding development of method to measure ambient concentrations (DNR is required to use Federal Reference Method and Federal Equivalent Methods for measurement of ambient concentrations of substances) (assumes 2000 hours total). This is typically done by EPA, but because there is no federal standard, DNR would have to take on this task. This is not currently an area of expertise for DNR and would be challenging to implement. Method development has a federal process that can be mimicked to some degree, but because the expertise does not exist at DNR, it may be necessary to bring in a consultant on this work.

2. Draft rule/Legislation - promulgation of a standard requires development of corresponding state law to put standard into Wisconsin Administrative Code. A rule to put a new, state developed standard into code assumes 1000 hours of staff time due to subject matter, stakeholder interest, and increased stringency with respect to federal requirements.

3. Implementation - The bill directs industrial sand facilities to perform ambient monitoring. DNR involvement in this process would consist of the following:

a. Development of quality control/quality assurance procedures including development of quality assurance

project plans, site audit criteria (for audits to be conducted annually by DNR staff) for crystalline silica. Assumes a one-time need of 400 hours of staff time to develop.

b. Ambient monitoring plan development assistance (with facility) and review (by DNR air monitoring staff), including PM10, crystalline silica, and PM2.5. Assumes 6 hours of development/review per plan (1 hour per instrument) and the 75 active sites currently operating.
c. Siting assistance by DNR staff to the facility in accordance with federal requirements (note: there would be no federal requirements specific to crystalline silica since there is no federal standard, so other particulate siting requirements would likely be utilized) for the specified pollutants (PM10, crystalline silica, PM2.5). Assumes 4 hours of travel to each site and 30 minutes of review per instrument (6 separate instruments - 2 PM10, 2 crystalline silica, 2 PM2.5) for a total of 7 hours per industrial sand source per year.

d. Site operator training by DNR on instrumentation and quality control procedures for PM10, crystalline silica, PM2.5. Assumes 2 hours per instrument type for each site for a total of 6 hours. Even a skilled operator will require training on crystalline silica monitoring procedures because there is no method.

e. Site audits - each industrial sand location would need to be audited annually by an independent (not the site operator) auditor. This would be accomplished by sending a DNR staff person out to perform the audit. Calculation assumes 1 hour of audit time per instrument, plus 4 hours of travel time. This is an ongoing cost.

f. Data entry, quality assurance of data for PM10, crystalline silica, PM2.5. Assumes 1 hour per month of QA time per instrument per site. This is an ongoing cost.

g. Travel is included assuming a round trip travel mileage of 300 miles per trip for WDNR monitoring staff.

In summary, one-time implementation costs are estimated at $363,100 or 3.75 FTE, while ongoing costs are estimated at $315,800 and 3.40 FTE.

Long-Range Fiscal Implications

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Fiscal Estimate Worksheet - 2015 Session

Detailed Estimate of Annual Fiscal Effect

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Description
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I. One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):

$363,100 or 3.75 FTE

II. Annualized Costs:	**Annualized Fiscal Impact on funds from:**	
	Increased Costs	Decreased Costs
A. State Costs by Category		
State Operations - Salaries and Fringes	$292,800	$
(FTE Position Changes)	(3.4 FTE)	
State Operations - Other Costs	23,000	
Local Assistance		
Aids to Individuals or Organizations		
TOTAL State Costs by Category	**$315,800**	**$**
B. State Costs by Source of Funds		
GPR		
FED		
PRO/PRS		
SEG/SEG-S	315,800	

III. State Revenues - Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, ets.)

	Increased Rev	Decreased Rev
GPR Taxes	$	$
GPR Earned		
FED		
PRO/PRS		
SEG/SEG-S		
TOTAL State Revenues	**$**	**$**

NET ANNUALIZED FISCAL IMPACT

	State	Local
NET CHANGE IN COSTS	$315,800	$
NET CHANGE IN REVENUE	$	$

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