

## FACILITY WIDE RISK ASSESSMENT REQUIREMENTS UNDER THE EJ RULES

### GUIDANCE FOR MAJOR FACILITIES SEEKING TITLE V OPERATING PERMIT RENEWAL

Under the EJ Rules, a major facility seeking renewal of their air operating permit is required to include a facility-wide risk assessment pursuant to N.J.A.C. 7:1C-8.4 unless the facility is exempt pursuant to N.J.A.C. 7:1C-8.3(a)1. The purpose of this guidance is to address the facility-wide risk assessment protocol requirement at N.J.A.C. 7:1C-8.4. Major facilities may use this guidance to determine if they can use the Risk Screening Worksheet (RSW) to demonstrate negligible risk. If a facility cannot use the RSW for all air toxic emissions that are above the applicable reporting threshold, this guidance explains how a facility may obtain conditional protocol approval to include preliminary modeling results in their EJIS.

**Practice tip:** if your facility has a modification pending with the renewal, the Department encourages the facility to evaluate air toxic emissions for both activities to avoid having to re-do the evaluation during the permit application stage.

#### DIRECTIONS FOR USE

1. Determine if your facility may use the RSW for some or all of your air toxic emissions that are above the applicable reporting threshold.
  - a. If yes for some or all, include the following in your EJIS: a narrative description, copy of the RSW results, and copy of the completed checklist (Attachment A). Remember to sign the checklist.
  - b. If no for some or all, move to step 2.
2. Determine if your facility would like to use the checklist below for conditional approval of your protocol for air toxic emissions that are above the applicable reporting threshold and for which your facility could not screen out using the RSW.
  - a. If yes, prepare your protocol and complete the checklist (Attachment B). Remember to sign the checklist. Submit both to the Department by email to Jillian Alexander at [jillian.alexander@dep.nj.gov](mailto:jillian.alexander@dep.nj.gov).
  - b. The Department will review and conditionally approve the protocol if complete and accurate.
  - c. Once the facility receives conditional approval, the facility runs the model and includes a narrative along with the modeling results in its EJIS.

#### RISK SCREENING WORKSHEET

A facility may use the RSW if the RSW demonstrates that there is negligible risk for some or all of their air toxic emissions that are above the applicable reporting threshold. In this case, no additional protocol approval is required for those substances that demonstrate negligible risk as the RSW is an approved approach and is inherently conservative. The facility must include a copy of the RSW results in the EJIS.

*Please note that this is a guidance document only and use of this guidance is neither mandatory nor exhaustive. This document does not constitute final agency action and may be revised at any time.*

The Department also requests that the facility identify if there is a permit application for modification pending with the renewal permit application. If yes, the facility should inform whether the facility considered emissions from both activities.

To use the RSW to comply with N.J.A.C. 7:1C-8.4, the facility must be able to check all of the boxes below for those air toxic emissions that screen out using the RSW, with a signature representing compliance with the below. **The list is included as Attachment A along with a signature line and placeholders for the facility to include facility identifying information. The signed form with checked boxes must be submitted with the EJIS.**

- ☐ All emission rates, stack parameters, operating scenarios, and limiting assumptions match the current permit application pursuant to Technical Manual 1003.
- ☐ The application and RSW incorporate all modifications and general operating permits since the facility's last renewal permit was issued, with no new changes pursuant to N.J.A.C. 7:27-22.30(a).
- ☐ The application and RSW include all of the applicable pollutants that are above the reporting thresholds at N.J.A.C. 7:27-17.
- ☐ The facility used the 04/2023 version of the RSW, at <https://dep.nj.gov/boss/risk-screening-tools/>.

## MODELING PROTOCOL

If the RSW does not demonstrate negligible risk for all air toxic emissions that are above the applicable reporting threshold, modeling must be performed for those air toxic emissions that could not be screened out with the RSW. As part of the modeling, Department approval of the protocol is required. See N.J.A.C. 7:1C-8.4(b).

The Department may grant conditional approval of a modeling protocol if the facility represents that the information below is included in their proposed protocol. Such conditional approval would be granted with the understanding that once the Department completes its comprehensive technical review during application review (post EJ process), the Department may require the facility to revise the protocol and run the model again.

To be eligible for conditional approval of a modeling protocol, the facility must be able to check all of the boxes below for those air toxic emissions that require second level modeling, with a signature representing compliance with the below. The Department also requests that the facility identify if there is a permit application for modification pending with the renewal permit application. If yes, the facility should inform whether the facility is modeling both activities.

**Please note that all boxes below must be checked. The list is included as Attachment B along with a signature line and placeholders for the facility to include facility identifying information. The signed form with checked boxes must be submitted with the EJIS to be eligible for a conditional approval.**

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- ☐ All emission rates, stack parameters, operating scenarios, and limiting assumptions in the protocol match the current permit application pursuant to Technical Manual 1003.
- ☐ The application and protocol incorporate all modifications and general operating permits since the facility's last renewal permit was issued, with no new changes pursuant to N.J.A.C. 7:27-22.30(a).
- ☐ The application and protocol include all of the applicable pollutants that are above the reporting thresholds at N.J.A.C. 7:27-17.
- ☐ The application uses the reference concentrations and unit risk factors as identified in the RSW or Toxicity Values for Inhalation Exposure (<https://dep.nj.gov/wp-content/uploads/boss/risk-screening/toxall-04-2023.pdf>), and pursuant to Technical Manual 1003.
- ☐ The modeling includes the following:
  - ☐ The latest version of AERMOD. Fill in Model # \_\_\_\_\_
  - ☐ A project description and site characteristics, as described in Technical Manual 1002, Section 6.1
  - ☐ A current facility plot plan that identifies
    - ☐ the locations of all emission points, buildings and structures onsite, facility property line and facility fence line (if any)
    - ☐ Base elevation, height, width and length of all buildings and structures
  - ☐ A discussion of the receptor network with a description of receptor spacing and a figure including the receptor locations
  - ☐ The location of all sensitive receptors
  - ☐ A Good Engineering Practice (GEP) Stack Height Analysis (if applicable) that identifies all buildings on and off site with the potential to cause aerodynamic downwash from the stack
  - ☐ An Urban/Rural determination that includes a land use analysis and population density procedure
  - ☐ Topography that describes any terrain considerations
  - ☐ Meteorological data that represents the facility location

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#### ATTACHMENT A

<b>Facility name</b>	
<b>PI number</b>	
<b>Permit activity number for renewal</b>	
<b>Permit activity number for modification, if applicable</b>	
<b>EJ Project ID number</b>	

On behalf of the above identified facility, I represent that I am familiar with the information provided in this document for those air toxic emissions that are above the applicable reporting threshold and, using the Risk Screening Worksheet (RSW), are demonstrated to have negligible risk. I further represent that by signing and checking each of the boxes below, the information is true and accurate. A copy of the RSW is included in the EJS.

#### I. FOR INFORMATIONAL PURPOSES

Is there a permit application for modification pending with this permit renewal application?

- ☐ Yes
- ☐ No

If yes, has the facility evaluated air toxic emissions that are above the applicable reporting threshold for both activities?

- ☐ Yes
- ☐ No

#### II. CHECKLIST

- ☐ All emission rates, stack parameters, operating scenarios, and limiting assumptions match the current permit application pursuant to Technical Manual 1003.
- ☐ The application and RSW incorporate all modifications and general operating permits since the facility's last renewal permit was issued, with no new changes pursuant to N.J.A.C. 7:27-22.30(a).
- ☐ The application and RSW include all of the applicable pollutants that are above the reporting thresholds at N.J.A.C. 7:27-17.

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- ☐ The facility used the 04/2023 version of the RSW, available at <https://dep.nj.gov/boss/risk-screening-tools/>

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Name and title

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Signature and date

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## ATTACHMENT B

<b>Facility name</b>	
<b>PI number</b>	
<b>Permit activity number for renewal</b>	
<b>Permit activity number for modification, if applicable</b>	
<b>EJ Project ID number</b>	

On behalf of the above identified facility, I represent that I am familiar with the information provided in this document for those air toxic emissions that require second level modeling and that by signing and checking each of the boxes below, the information is true and accurate.

### I. FOR INFORMATIONAL PURPOSES

Is there a permit application for modification pending with this permit renewal application?

☐ Yes

☐ No

If yes, has the facility evaluated air toxic emissions that are above the applicable reporting threshold for both activities?

☐ Yes

☐ No

### II. CHECKLIST

- ☐ All emission rates, stack parameters, operating scenarios, and limiting assumptions in the protocol match the current permit application pursuant to Technical Manual 1003.
- ☐ The application and protocol incorporate all modifications and general operating permits since the facility's last renewal permit was issued, with no new changes pursuant to N.J.A.C. 7:27-22.30(a).
- ☐ The application and protocol include all of the applicable pollutants that are above the reporting thresholds at N.J.A.C. 7:27-17.
- ☐ The application uses the reference concentrations and unit risk factors as identified in the RSW or Toxicity Values for Inhalation Exposure (<https://dep.nj.gov/wp-content/uploads/boss/risk-screening/toxall-04-2023.pdf>), and pursuant to Technical Manual 1003.

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- ☐ The modeling includes the following:
  - ☐ The latest version of AERMOD. Fill in Model # \_\_\_\_\_
  - ☐ A project description and site characteristics, as described in Technical Manual 1002, Section 6.1
  - ☐ A current facility plot plan that identifies
    - ☐ the locations of all emission points, buildings and structures onsite, facility property line and facility fence line (if any)
    - ☐ base elevation, height, width and length of all buildings and structures
  - ☐ A discussion of the receptor network with a description of receptor spacing and a figure including the receptor locations
  - ☐ The location of all sensitive receptors
  - ☐ A Good Engineering Practice (GEP) Stack Height Analysis (if applicable) that identifies all buildings on and off site with the potential to cause aerodynamic downwash from the stack
  - ☐ An Urban/Rural determination that includes a land use analysis and population density procedure
  - ☐ Topography that describes any terrain considerations
  - ☐ Meteorological data that represents the facility location

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Name and title

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Signature and date