

Attachment D:
DEC Industrial Performance Standards
Check List and Narratives



Industrial Performance Standards Checklist for Newly Proposed Projects

All projects within the Devens Regional Enterprise Zone (DREZ) must comply with the Devens Enterprise Commission (DEC) Industrial Performance Standards (IPS) under 974 CMR 4.00. This checklist is intended to assist Applicants in determining at the time of submittal, or ideally before submittal, if their project may or may not involve development and/or activities that may impact sound, vibration, air quality, or lighting within the DREZ.

Site layout, building(s) design/orientation, traffic patterns, location of outdoor equipment and numerous other project components can impact sound, vibration, air quality, and lighting within the DREZ. By identifying any potential IPS concerns early on in the review process, Applicants can design their projects to ensure compliance with the IPS at all times and avoid potential future violations of the IPS and costly mitigation after the fact.

Please note, if a project requires an air permit from the Massachusetts Department of Environmental Protection (DEP), the Applicant will need to initiate permitting through the DEP office as well. Even if a project requires a DEP air permit, the proponent still must demonstrate compliance with the DEC IPS.

Please circle the correct answer to each question in this checklist. Please note that by circling "NO", the Applicant is not relieved of demonstrating compliance with the IPS requirements. If "NO" is circled and a potential concern is identified during the review process, it could temporarily suspend the approval process timeline until the concern is adequately addressed. If "YES" is answered, please explain and provide any supporting studies or information to aid the DEC in their evaluation of the project.

Project Name Devens Public Safety Building 270 Barnham Road

Does the proposed project and associated activities involve any potential increases in sound, vibration, air quality, odor, dust, lighting and/or electromagnetic interference that are covered under the DEC Industrial Performance Standards?

YES	NO
------------	-----------

If you answered yes, will the Applicant demonstrate compliance directly or will the project proponent employ an expert to demonstrate compliance? Please provide pertinent contact information of the responsible official:

The applicant employed various experts to demonstrate compliance with the standard.

Industrial Performance Standards Checklist for Newly Proposed Projects cont...

Noise

Does the proposed project have the ability to increase sound?

1. Will the increase in sound plus background sound exceed 974 CMR 4.05 (3)a?
2. Will the total sound plus background sound exceed 974 CMR 4.05 (3)b?
3. Will the increase in sound create pure tones that will exceed 974 CMR 4.05 (3)c and/or 974 CMR 4.05 (3)d7?
4. Will the increase in sound create impulsive sounds that will exceed 974 CMR 4.05 (3)d1-6 and/or 974 CMR 4.05 (3)d8?
5. Are there procedures and controls proposed to reduce sound during earth removal per 974 CMR 4.07(10)?

Noise reduction requirements are included in the Demolition Plan.

YES NO

YES NO

YES NO

YES NO

YES NO

YES NO

Checklist Options to Demonstrate Sound Compliance

6. Have all of your potential sound sources been identified?
7. Will spreadsheet calculations of the potential increase in sound be provided?
8. Will sound modeling of the proposed project be provided?
9. Will the facility submit a protocol describing the potential sound monitoring, metrics, and modeling as required?
10. Does the project propose to collect background sound data (typically 7-days worth of valid data is sufficient)?
11. If the facility intends to collect background sound data will it include other qualifying weather data such as wind speed, wind direction, sky conditions, etc.?
12. Is mitigation to reduce the overall sound profile proposed?
13. Is sound mitigation to be assumed when calculations or modeling is performed?
14. Is compliance monitoring proposed to demonstrate that the project meets the estimated increases in sound?
15. Have increases in sound with respect to traffic been considered?

YES NO

YES NO

YES NO

YES NO

YES NO

YES NO

YES NO

YES NO

YES NO

YES NO

For answers to questions 1 through 15 regarding noise, refer to narrative attached.

Industrial Performance Standards Checklist for Newly Proposed Projects cont...

Vibration

Does the proposed project have the ability to increase vibration?

16. Will the increase in vibration exceed 974 CMR 4.05 (4)a??

Checklist Options to Demonstrate Vibration Compliance

17. Have all of the potential vibration sources been identified?

18. Will spreadsheet calculations of the potential increase in vibration be provided?

19. Will the proponent provide vibration modeling of the proposed project?

20. Does the project propose to collect background vibration data?

21. Is mitigation proposed to reduce the overall vibration profile?

22. Is vibration mitigation to be assumed when the calculations or modeling performed?

23. Is compliance monitoring proposed to demonstrate that the project meets the estimated increases in vibration as proposed?

YES	<input checked="" type="radio"/> NO
YES	NO
<input checked="" type="radio"/> YES	NO
YES	<input checked="" type="radio"/> NO
YES	<input checked="" type="radio"/> NO
YES	<input checked="" type="radio"/> NO
YES	<input checked="" type="radio"/> NO
YES	<input checked="" type="radio"/> NO

17. Vibrations from the site are temporary due to earth moving during construction. Requirements are included in the demolition plan. No permanent impacts from the completed site. (Refer to Narrative attached.)

Industrial Performance Standards Checklist for Newly Proposed Projects cont...

Air Quality

Does the proposed project have the ability to create air, visible, and/or odor emissions?

24. Will the proposed project meet the air quality standards in 974 CMR 4.02(3)

25. Are there procedures and controls proposed to minimize impacts during earth removal per 974 CMR 4.07(7)?

26. Will the proposed project require a MassDEP air quality permit per 974 CMR 4.02 (1)

If the project will require an air permit, then the proponent should set up a meeting with the regional MassDEP office to determine air permitting requirements, and answer the following:

27. Will the proposed project submit a Limited Plan Approval application?

28. Will the proposed project submit a Non-Major Comprehensive Plan Approval application?

29. Will the proposed project submit a Major Comprehensive Plan Approval application?

30. Will the proposed project be a Title V source?

31. Will the proposed project be a PSD source?

Checklist Options to Demonstrate Air Quality Compliance

32. Have you identified all of your potential air, visible and/or odor sources?

33. Will there be any visible emissions?

34. Will there be any dust emissions?

35. Will there be any odor emissions?

36. Will there be any potential increases in air, odor or dust emissions within the DREZ that will impact any internal or external receptors?

37. Will the project proponent provide spreadsheet calculations of the potential increase in air and/or odor emissions within the DREZ to demonstrate how the increase will not impact any internal or external receptors?

	YES	<input checked="" type="radio"/> NO
	<input checked="" type="radio"/> YES	NO
	<input checked="" type="radio"/> YES	NO
	YES	<input checked="" type="radio"/> NO
	YES	NO
	YES	NO
	YES	NO
	YES	NO
	<input checked="" type="radio"/> YES	NO
	YES	<input checked="" type="radio"/> NO
	YES	<input checked="" type="radio"/> NO
	YES	<input checked="" type="radio"/> NO
	YES	<input checked="" type="radio"/> NO
	YES	<input checked="" type="radio"/> NO
	YES	<input checked="" type="radio"/> NO

Questions 25 and 32. Impacts during construction are controlled via sediment and erosion controls included on the demolition plan. No permanent impacts once the site is completed.

Industrial Performance Standards Checklist for Newly Proposed Projects cont...

Checklist Options to Demonstrate Air Quality Compliance (cont.)

38. Will the project proponent provide air and/or odor modeling of the proposed project within the DEC or into the neighborhood surrounding the DEC??

YES NO

39. Is mitigation proposed to reduce the overall air and/or odor profile?

YES NO

40. Is air pollution and/or odor control to be assumed when the calculations or modeling is performed?

YES NO

41. Is compliance monitoring proposed to demonstrate that the project meets the estimated increases in air and/or odor as proposed?

YES NO

39. Construction air quality requirements are included in sediment plan during construction. No permanent air quality impacts from the completed facility.

Lighting/Illumination

Does the proposed project have the ability to create additional Illumination?

YES NO

42. Will lighting meet the illumination standards set forth in 974 CMR 4.04(3)?

YES NO

43. Have all of the potential light sources been identified?

YES NO

44. Will spreadsheet calculations of the potential increase in light and how it will not affect the Observatory outlined in 974 CMR 4.04(1) or any external or internal receptors be provided?

YES NO

45. Is mitigation proposed to reduce the overall light profile?

YES NO

Need to include all in lighting design for the site. Assumed to be done by the lighting design consultant.

Electromagnetic Interference

Does the proposed project have the ability to create electromagnetic interference?

YES NO

46. Have you identified all your potential electromagnetic sources?

YES NO

47. Are you proposing to provide spreadsheet calculations of the potential increase in electromagnetic interference and how it will not affect any internal or external receptors as per 974 CMR 4.03(3)?

YES NO

48. Are you proposing any mitigation to reduce your overall electromagnetic profile?

YES NO

49. Will your project comply with all the electromagnetic requirements under 974 CMR 4.03?

YES NO

46. No overhead electrical lines- all electrical feeds are below ground
49. No radio frequencies between 1400-1720 MHZ are planned for the site.

Devens Public Safety Building Project- 270 Barnum Road Devens MA

Narrative to Industrial Performance Standards (IPS) Checklist for Newly Proposed Projects

General

This narrative was prepared to coincide with Level Two Unified Checklist Item 1(r) - Demonstrating Project Compliance with Devens Enterprise Commission (DEC) Industrial Performance Standards (IPS) Checklist for Newly Proposed Projects under 974 CMR 4.00.

Brennan Consulting, along with experts designing portions/components of the project, conducted a review of the items listed within the (IPS) checklist to determine that the major items listed including Noise, Vibration, Air Quality, Lighting/illumination and Electromagnetic Interference (EMI) have been mitigated in various project related documents to meet the Industrial Performance Standards (IPS) checklist. The following is a narrative that discusses/explains the answers given to questions asked in the various sections of the (IPS) checklist.

Noise

Answers to questions regarding Noise or the project's ability to increase noise (IPS questions 1 thru 15).

All but one of the questions contained in Noise section of the IPS are answered no based on the following understanding:

The project does not create any new or sustained/day to day noise once the facility is built. The only day to day noise anticipated is the noise generated by demolition, excavation and construction/renovation of the facility itself.

The only expected noise generated by the completed facility will be fire truck sirens which will be used during emergency calls only. This activity is permitted in 974 CMR 4.

IPS question #5

This question is in regards to noise generated by earth removal operations. The project plan set includes a Demolition Erosion & Sedimentation Control Plan on which notes have been added specifying the contractor's hours of operation allowed so as to minimize noise impacts after normal business hours. The notes also include noise levels allowed for the contractor's vehicles and equipment used to perform the work.

Vibration

Answers to Questions regarding Vibration (IPS questions 16 thru 23)

Question 17-"Have all potential vibration sources been identified?"

The Devens Fire Station facility is not expected to generate any vibrations on a daily basis. The only vibrations identified in the (IPS) are related to the earth moving and demolition operations work which are directly related to the construction of the new facility. The hour of operation restrictions placed on

the contractor will control these activities, keeping the vibration making activities within the (DEC) Performance Standard which allows for vibrations to increase during construction.

Air Quality

Answers to Questions regarding Air Quality

The finished project expected to meet all of the air quality requirement in 974 CMR 4.02.

Question 25 “Are these any procedures and controls proposed to minimize impacts during earth removal per 974 CMR 4.07(7)?”

In response, the Demolition and Erosion & Sediment Control Plan includes notes/requirements for the contractor to control and contain dust generated by construction operations throughout the demolition and construction process. Including dust generated by earth removal operations.

Lighting and Illumination

Lighting and Illumination Questions and Responses are to be provided by the lighting consultant designing the site lighting for the project.

Electromagnetic Interference (EMI)

Brennan Consulting reviewed the (IPS) questions 46 thru 49 and 974 CMR 4.03 regarding potential (EMI) related to the project.

The first potential conflict listed in 974 CMR 4.03 is interference due to added overhead wires. Since, the site is a renovation of an existing building, all overhead wires are in place and not being updated or added to, there is no expectation of an (EMI) generated by added overhead electrical wires. All of the power to the building is already in place.

The second potential electromagnetic source identified in 974 CMR 4.03 has to do with radio frequencies (1400-1720 MHZ), that cannot be used without FCC permission. The site design does not include adding any radio components with frequencies between 1400 – 1720 MHZ, which would interfere with the radio telescope operated by Harvard University and the Smithsonian Institution and located on Oak Hill on Pinnacle Road in the Town of Harvard.

DEVENS PUBLIC SAFETY BUILDING
270 Barnum Road, Devens MA

PROJECT NARRATIVES

Request for Determination of Applicability (RFD) or a Notice of Intent (NOI) shall be submitted in accordance with Article XII of the By-Laws and 974 CMR 4.06 .

Brennan Consulting reviewed the G.I.S. mapping via the MassMapper web site. Based on that review the nearest wetlands are located 500 feet south of the project site. Therefore, the project is not subject to the Wetland Protection Act. Refer to Attachment G for Environmental Mapping.

A narrative demonstrating compliance with the Reuse Plan and By-Laws meeting the specifications of 974 CMR 1.02.

We've reviewed 974 CMR 1.02 and Tri-Town Five-Year Review of the Devens Reuse Plan which includes a map of Devens with the Zoning that puts the site in a Business/Community Services Zone.

A written statement of compliance with the Devens Open Space and Recreation Plan (DOSRP) and the Devens Main Post Trails report dated July 2001, to determine the effects, if any, of proposed development on resource areas, proposed trail rights-of-way, active and passive recreation areas, and other amenities included in the DOSRP.

The mapping included in the (DOSRP) dated 2008 indicates that the project site is located outside of the open space and resource areas included in the (DOSRP).

Climate change mitigation, adaptation and greenhouse gas emissions mitigation measures in accordance with the requirements of 974 CMR 4.11.

LEED silver certification is being sought and the design requirements for the USGBC LEED requirements will dictate the mitigation of greenhouse gases. 974 CMR 4.11 generally does not apply to the scale of this project in terms of average daily trips and parking quantities. It is required that the applicants join the Devens Eco-Efficiency Center and a fee has been sent for membership.

Location and dimensions (including height) of all storage facilities for equipment, material, and other like items. Location of all underground and aboveground fuel, combustible, and flammable liquid storage tanks greater than 250 gallons.

OUR WORLD IS ACCURACY AND PRECISION

Areas of equipment have been indicated on the Site Plan. There are no underground or above ground fuel or flammable liquid tanks on site.

All Resource Areas as defined by 974 CMR 4.06, including existing natural features (ponds, brooks, wetlands, etc.), Federal Emergency Management Agency (FEMA) flood plain elevations on and/or adjacent to the lot, Flood Insurance Rate Map (FIRM) panel number, zone designation, and base flood elevation.

All available mapping information available via Mass Mapper GIS has been reviewed. Based on the GIS site review, no resource areas are located within the site proper. The nearest resource discovered on Mass Mapper is a Zone Is Wellhead protection area located 180' north of the property line. Refer to Attachment G



OUR WORLD IS ACCURACY AND PRECISION