

Sound

Applicable Laws

- **Maine Sound Law**

- For residential neighbors:
 - 55 dBA hourly operating sound levels from 7 AM to 7 PM
 - 45 dBA hourly operating sound levels from 7 PM to 7 AM
- 75 dBA at facility property line

- **Belfast Sound Ordinance**

- For industrial activities:
 - 60 dBA from 7 AM to 9 PM
 - 55 dBA from 9 PM to 7 AM
 - May be exceeded by 10 dBA for more than 15 minutes in a day.

Sound

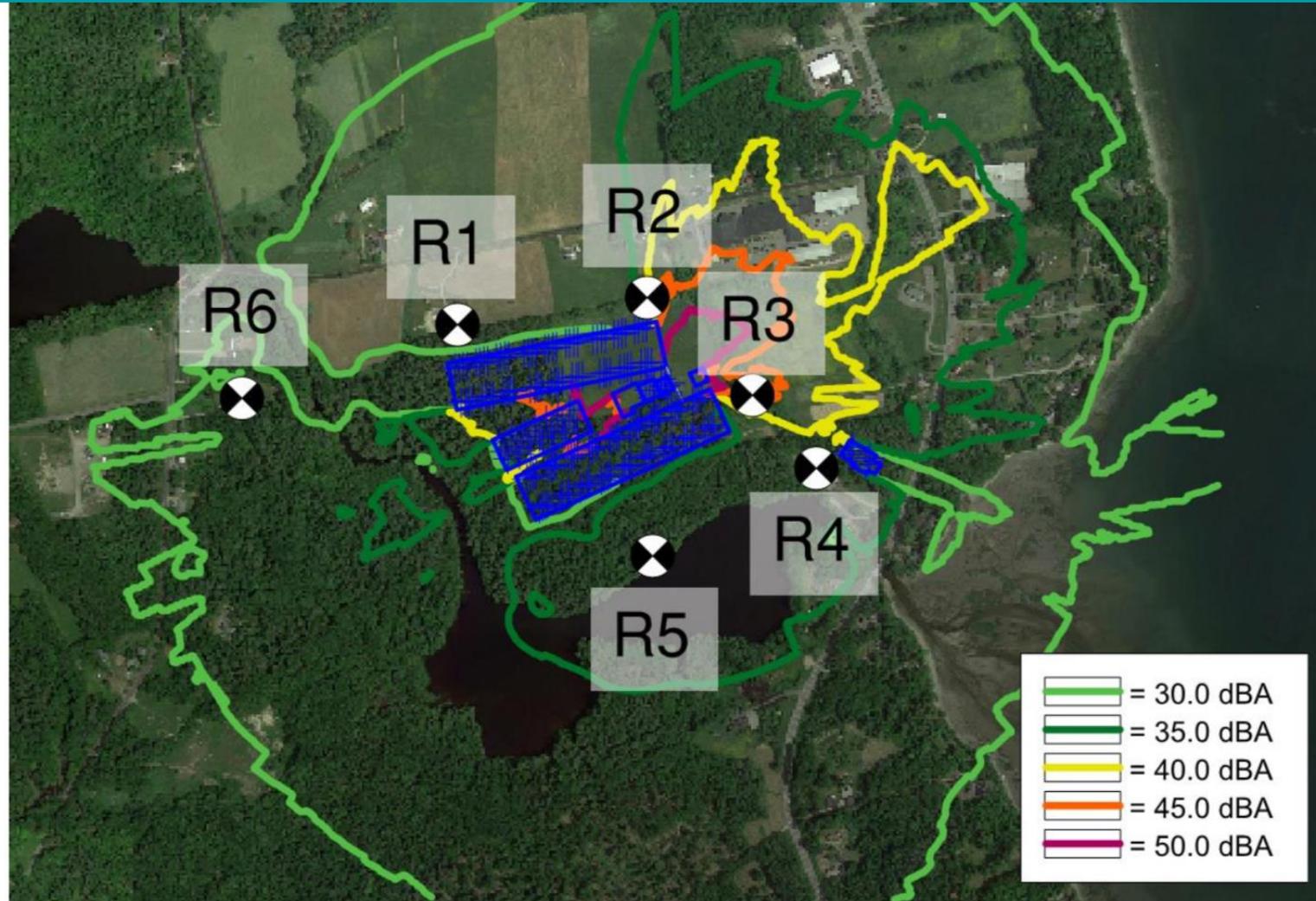
Sources Modeled

- All sources of noise were modeled
 - Fans
 - Pumps
 - Chillers
 - Backup Generators (only occasional)

Sound

Sound Contour Map

A-weighted Hourly
Equivalent Leq
Sound Level
Contours from
Regulated
Equipment



Sound

Sound Levels at Protected Locations

Estimated
Project Sound
Levels for
Routine
Operation

Nearby Protected Locations and Distance From Project Center	Estimated Project Sound Levels (dBA)
1 Northwest 975 ft.	34
2 North 585 ft.	37
3 Southeast 790 ft.	44
4 Southeast 1,230 ft.	39
5 South 950 ft.	38
6 West 2,115 ft.	31

Sound

Sound Levels During Construction

State limits nighttime construction sound levels to 45 dBA

City of Belfast exempts construction noise between 7 AM and 8 PM. From 8 PM to 7 AM it is restricted to 55 dBA

NAF has agreed to restrict outside construction activities to daylight hours

Equipment	Sound Level in dBA at 500 ft
Truck	54
Dozer	58
Excavator	60
Loader	59
Grader	58
Backhoe	60
Crane	47
Compressor	57
Pump	50
Generator	52
Welder	46
Roller	55