

# RYERSON UNIVERSITY



## MOE Noise Guidelines

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# MOE Noise Guidelines



- **INTRODUCTION**
- **FEW EXAMPLES**
- **MOE GUIDELINES**
- **SIMPLE APPLICATIONS**
- **CONCLUSIONS**

# MOE Noise Guidelines

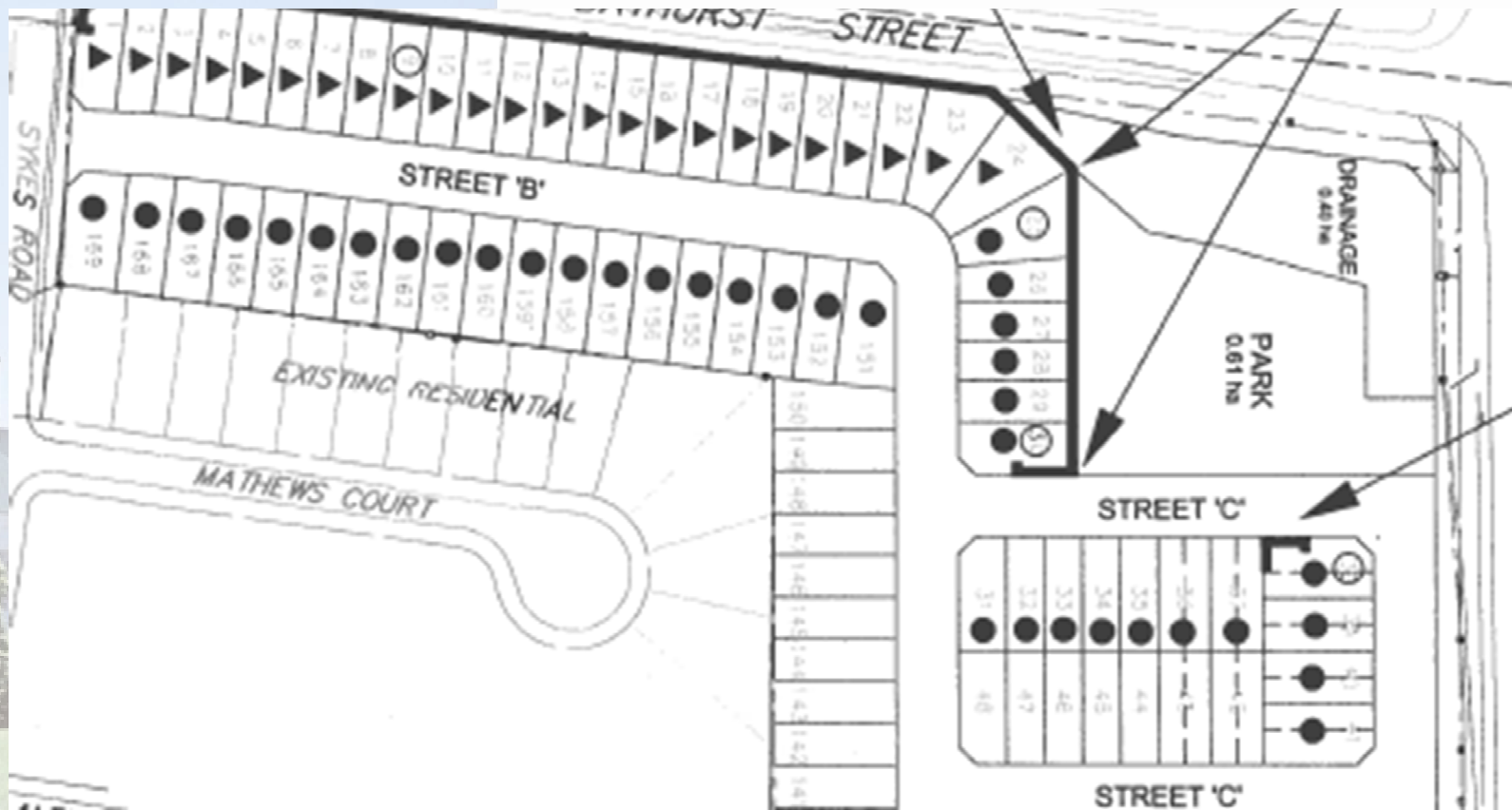
## INTRODUCTION



- **MANDATE**
- **EPA – 1971 ACT**
- **DEFINITION**
- **PLANNING ACT**
- **SECTION 9 OF EPA**

# MOE Noise Guidelines

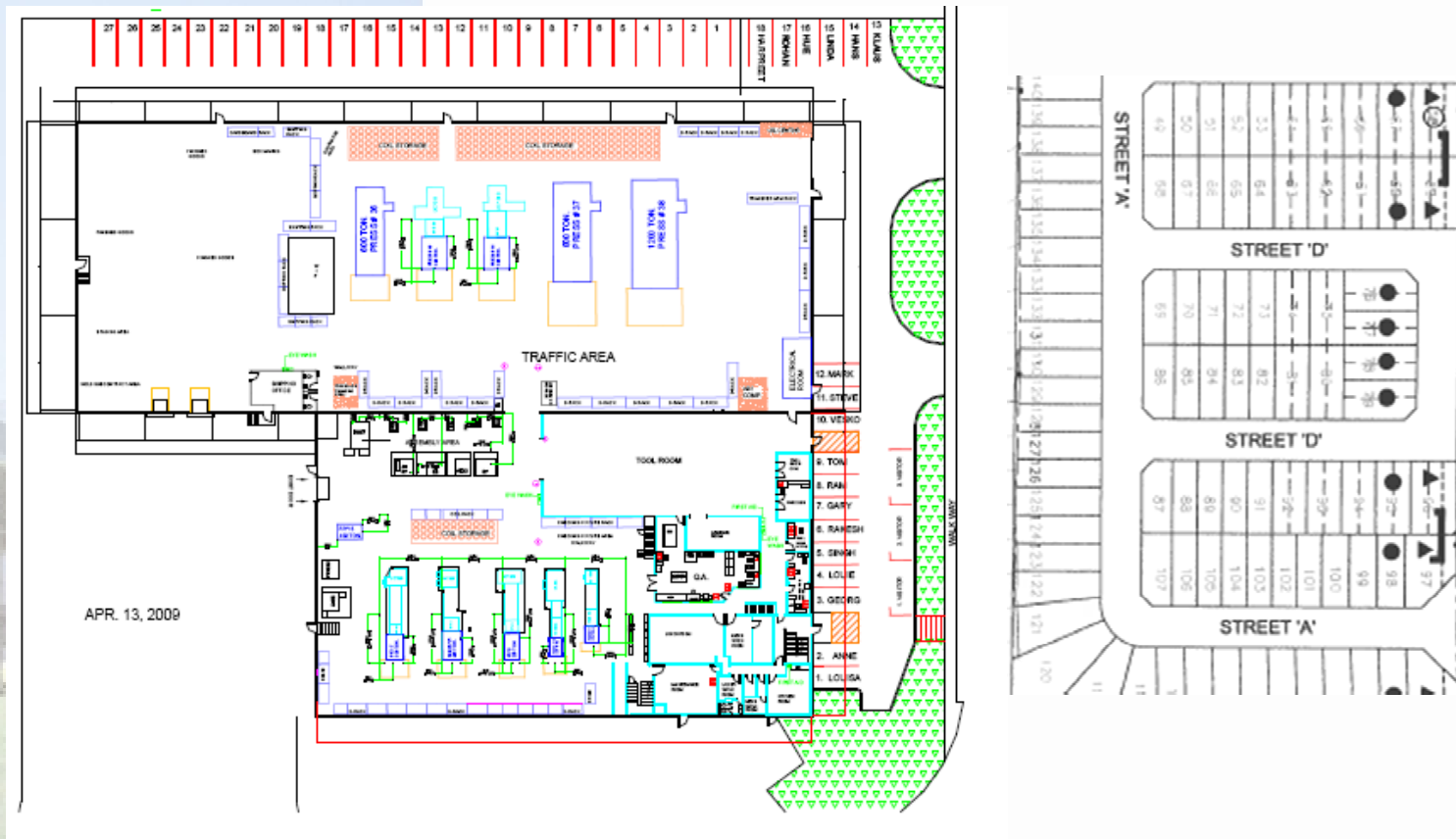
## FEW SITE EXAMPLES



# MOE Noise Guidelines

## FEW SITE EXAMPLES

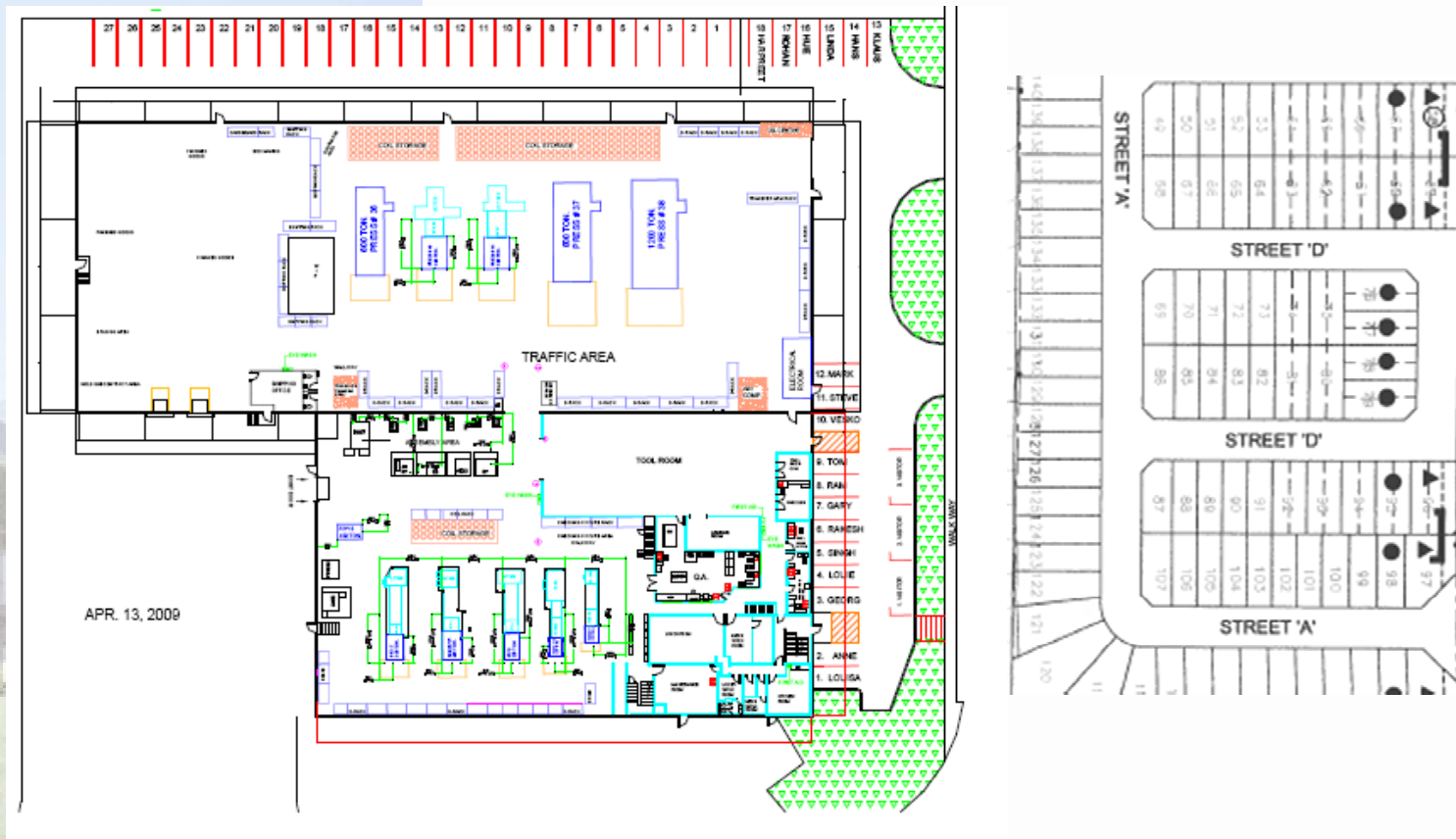
### A Punch Press Plant – Scenario I



# MOE Noise Guidelines

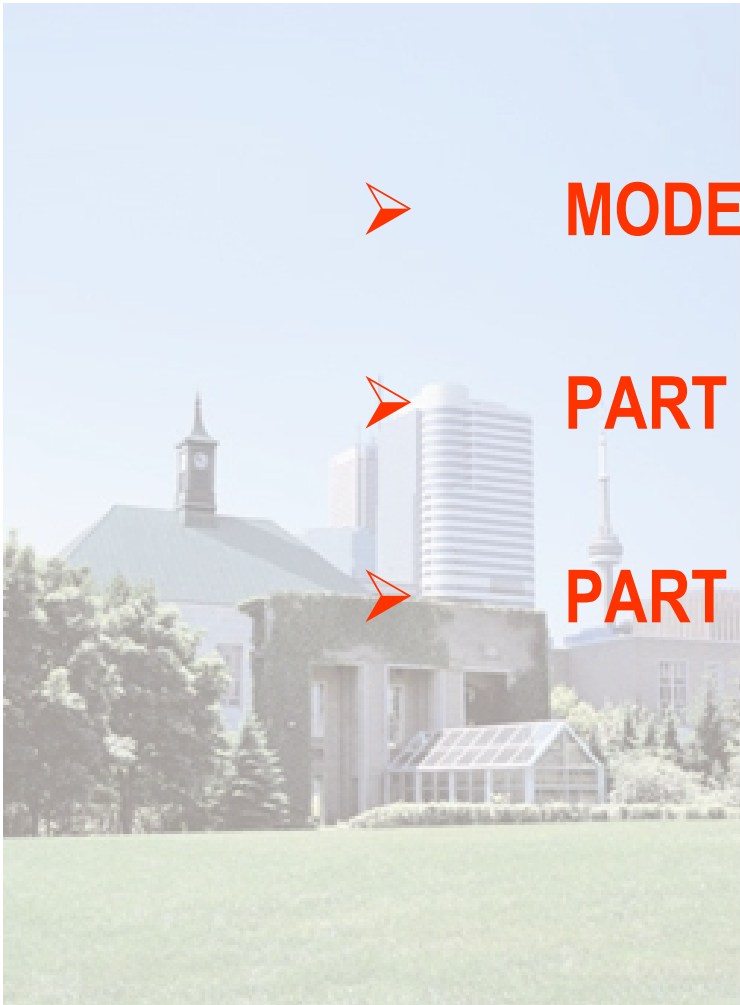
## FEW SITE EXAMPLES

### A Punch Press Plant – Scenario II




# MOE Noise Guidelines

## HOW TO APPLY EPA AND OTHER MANDATES

- 
- **MODEL NOISE CONTROL BY-LAW 1974**
  - **PART I – QUALITATIVE - SUBJECTIVE**
  - **PART II – QUANTITATIVE - COMPREHENSIVE**

# MOE Noise Guidelines

## HOW TO APPLY EPA AND OTHER MANDATES

- 
- **SOUND POWER OUTPUT**
  - **NOISE CONTROL AT SOURCE**
  - **PATH NOISE CONTROL**
  - **ESTABLISH NOISE LIMITS**
  - **MODEL MUNICIPAL NOISE CONTROL BY-LAW, 1978**



# MOE Noise Guidelines

## NOISE CONTROL BY-LAW – PART II - CONTENT

- 
- ❖ NPC-101 – TECHNICAL DEFINITIONS
  - ❖ NPC 102 – INSTRUMENTATION
  - ❖ NPC 103 – PROCEDURES
  - ❖ NPC 104 – SOUND LEVEL ADJUSTMENTS
  - ❖ NPC 105/205 – STATIONARY SOURCES
  - ❖ NPC 106/STAMSON -ROAD TRAFFIC SOUND LEVELS

# MOE Noise Guidelines

## NOISE CONTROL BY-LAW – PART II - CONTENT

- ❖ NPC 207 – IMPULSE VIBRATION IN RESIDENTIAL BUILDINGS
- ❖ NPC 115 – CONSTRUCTION EQUIPMENT
- ❖ NPC 116 – RESIDENTIAL AIR-CONDITIONERS
- ❖ NPC 117 – DOMESTIC OUTDOOR POWER TOOLS
- ❖ NPC 118 – MOTORIZED CONVEYANCES
- ❖ NPC 119 - BLASTING

# MOE Noise Guidelines

## NOISE CONTROL BY-LAW – PART II - CONTENT

- ❖ NPC 131 – GUIDELINES FOR NOISE CONTROL IN LAND-USE PLANNING
- ❖ NPC 132/232 – GUIDELINES FOR NOISE CONTROL IN RURAL AREAS
- ❖ NPC 133/233 – GUIDELINES ON REQUIRED INFORMATION FOR ASSESSMENT OF STATIONARY SOURCES OF SOUND
- ❖ NPC 134/234 – GUIDELINES ON REQUIRED INFORMATION FOR ASSESSMENT OF PLANNED LAND USES

# MOE Noise Guidelines

## MOE Procedures

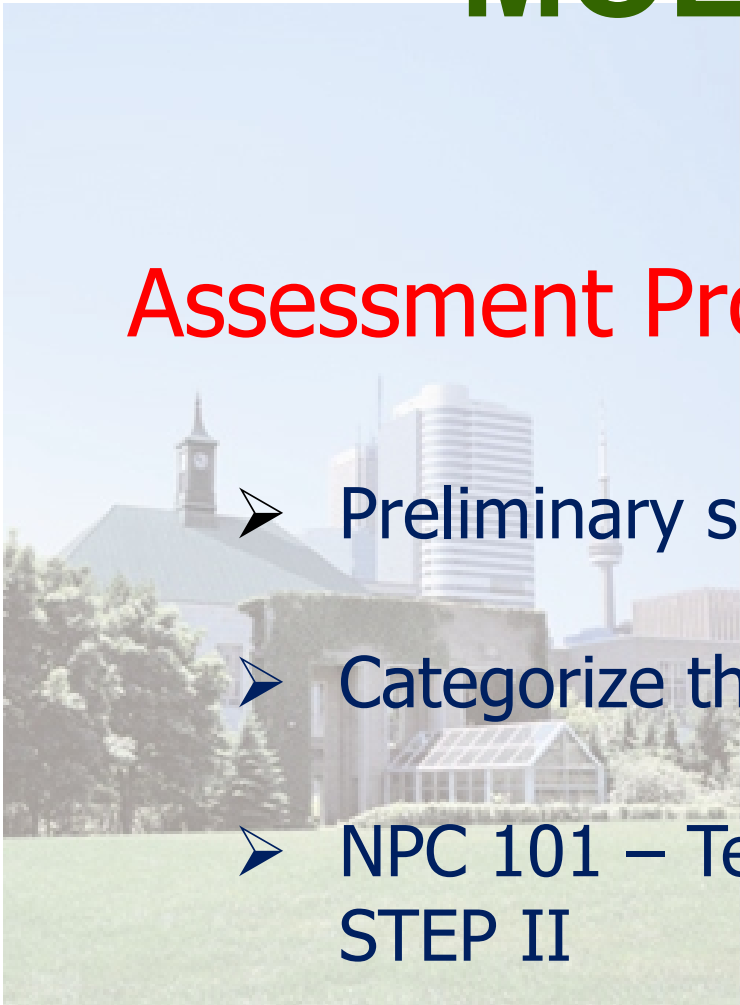
### Basic Purpose

- Measure and assess offending sound Levels
- Predict and assess offending sound levels

# MOE Noise Guidelines

## MOE Procedures

### Assessment Process: STEP I

- 
- Preliminary site visit
  - Categorize the sound sources
  - NPC 101 – Technical Definitions to determine STEP II

# MOE Noise Guidelines

## Assessment Process: STEP II

➤ Choose appropriate Instrumentation – NPC 102

1. Simple Sound Level Meter
2. Integrating Sound Level Meter
3. Octave Band Analyzer
4. Impulse Meter

# MOE Noise Guidelines

## Assessment Process: STEP III

- Establish Sound Level Limit – NPC 205/NPC 131
  1. Receptor Location
  2. Traffic Noise Model
  3. Other Industrial Sources
  4. 20 Minute and/or 48 Hour Measurements

# MOE Noise Guidelines

## Assessment Process: STEP IV - A

- Establish Sound Level of Industry – NPC 103
  1. Receptor Location
  2. Octave Band Readings
  3. Impulse Sound Readings
  4. Simple dBA Measurements



# MOE Noise Guidelines

## Assessment Process: STEP IV - B

- Establish Sound Level Transportation Sources – NPC 131
  1. Receptor Location
  2. Road/Rail Traffic Modelling – NEF/NEP Contours

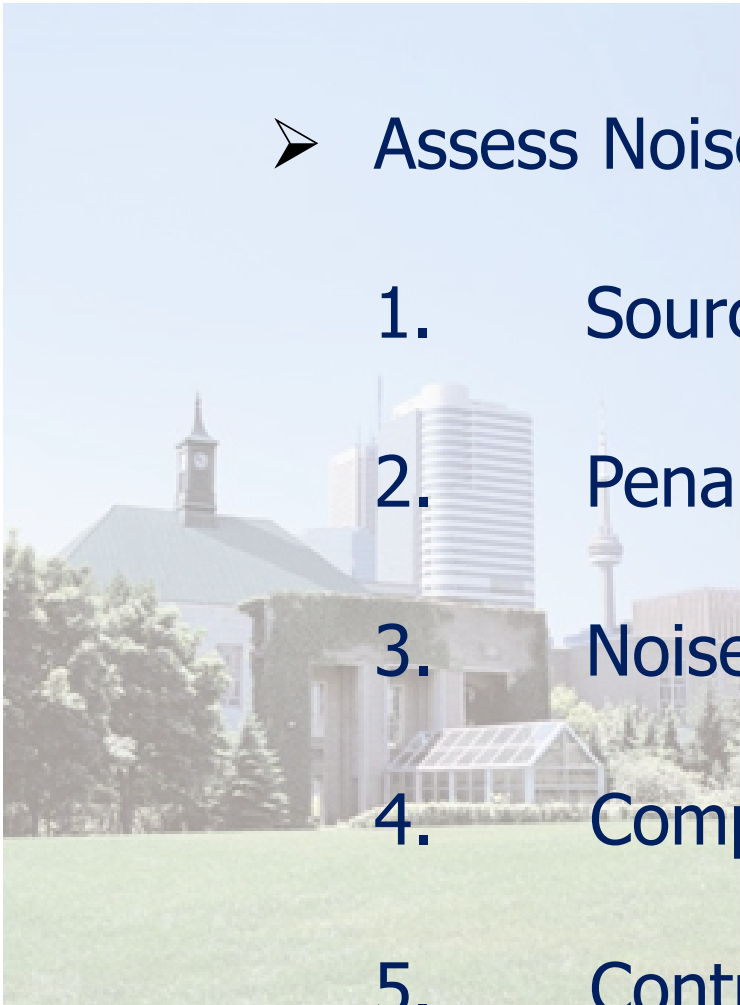
# MOE Noise Guidelines

## Assessment Process: STEP V

- Establish Source Character and Penalties NPC 104
  1. Impulse Sound
  2. Shooting Ranges
  3. Tonality
  4. Buzz and/or other characteristics

# MOE Noise Guidelines

## Assessment Process: STEP VI

- 
- Assess Noise Compliance
    1. Source Noise Level
    2. Penalty
    3. Noise Limit
    4. Compliance
    5. Control Measures

# MOE Noise Guidelines



**CONCLUSIONS**

**Any Questions?**