



Environmental Permitting and Hot Topics

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Strategic Projects Sector



**Minnesota Pollution
Control Agency**

MPCA's Permitting Authority

- Driven by Federal Regulations: Clean Water Act, Clean Air Act and RCRA, etc.
- Authority delegated to States - must be at least as stringent as Feds
- Specific legislation and rules have provided additional requirements to address issues and create flexibility

Who needs a permit?

- **Air** emissions
- **Wastewater** discharges
- **Land** – solid waste, hazardous waste, tanks



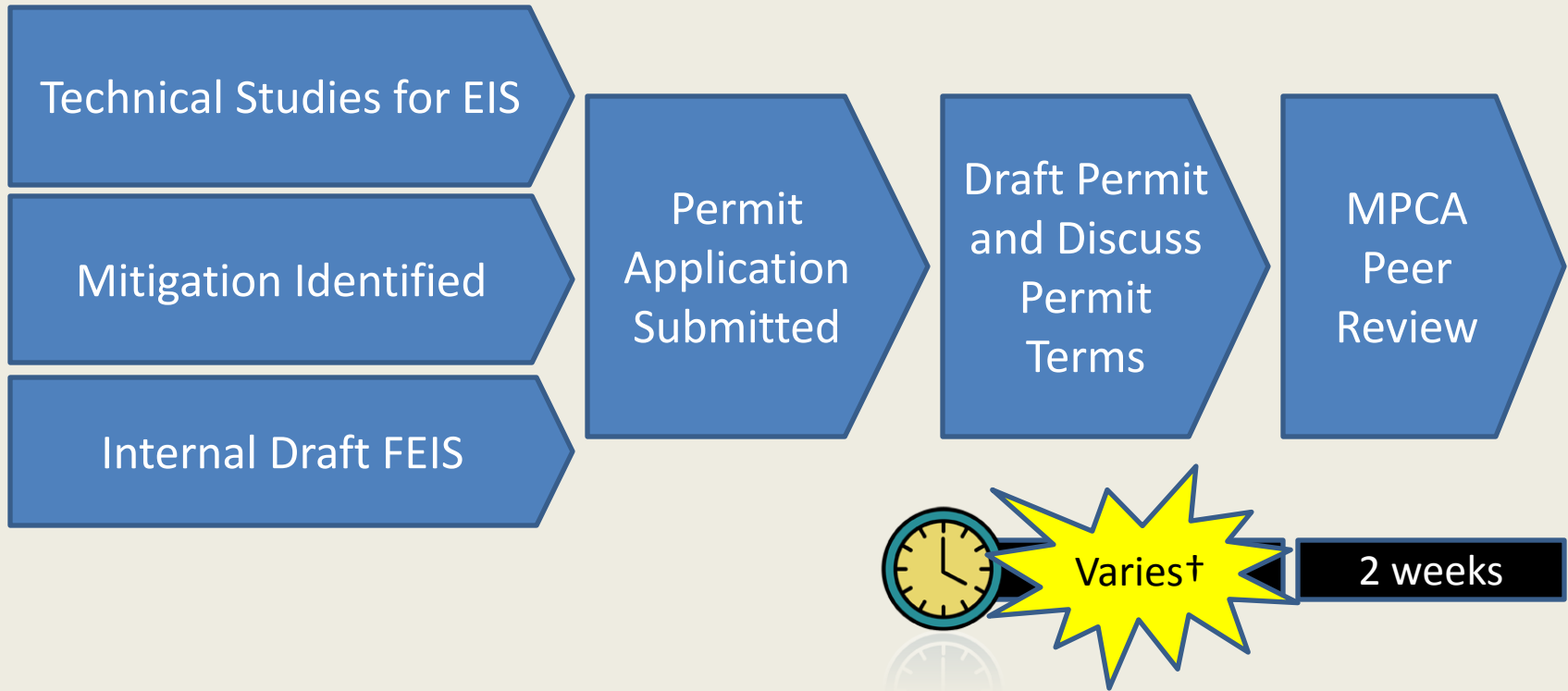
What is in a permit?

- Describes facility: location, what they make/do, pollution control equipment, etc.
- Specifies discharge/emissions limits
- Details reporting requirements
- Includes boilerplate including applicable federal and state regulations

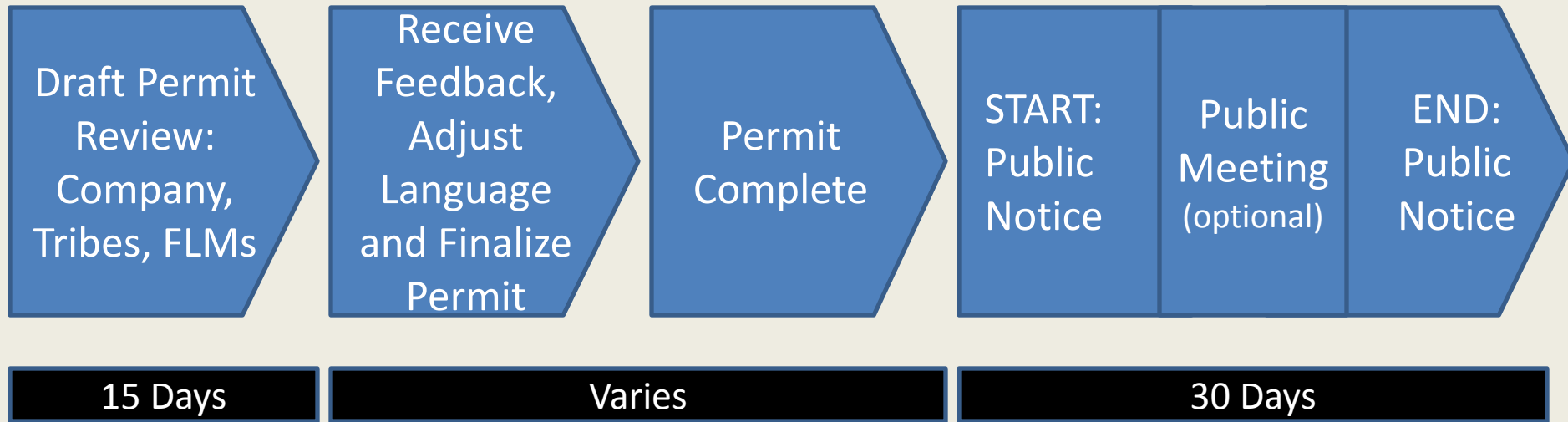
Types of Permits

- Individual permits – one permits covering one facility
- General permits – One permit covering many similar facilities
- Modification permits – Changes to an existing permit to address facility changes

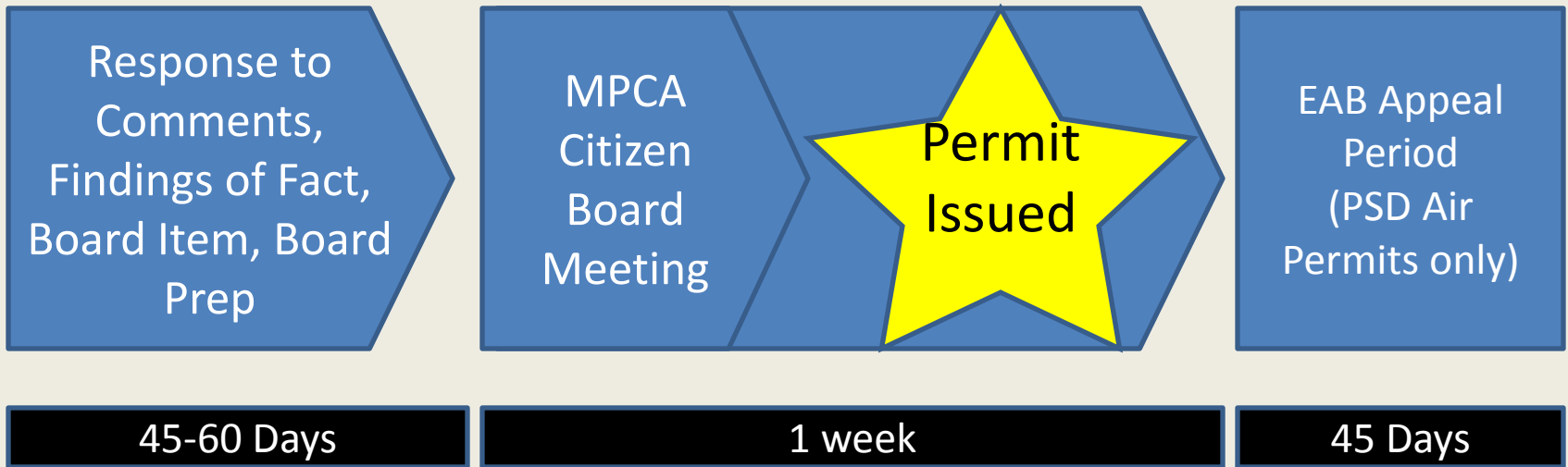
Typical Permit Issuance Process



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Major Air Issues

- Regional Haze / Visibility
- PM2.5
- Climate Change/Greenhouse Gases
- Mercury
- Fibers

Regional Haze / Visibility

- State Haze Plan Under Development
- Analysis Required Under Prevention of Significant Deterioration (PSD) Program
 - Federal Land Manager Role
- Issues of Mining Projects
 - Proximity
 - Control Technology Pilot Testing
- Control Technology Research Ongoing

Fine Particles – PM_{2.5}

- Federal Rules Promulgated
 - PSD Significant Emission Rates
 - National Ambient Air Quality Standards
 - PSD Increments
- Complexities
 - Emission Factors
 - Source Testing

Climate Change

- Global Issue
- Environmental Review and Permitting
 - Current MPCA Practice
 - Upcoming...
- MN Climate Change Advisory Group

Mercury

- Current Conditions
 - 2/3 of Lakes, Rivers Impaired Due to Mercury
 - Most (>95%) Mercury Contamination From Air Sources
- Mining Facilities Release Mercury from Fuels, Ore

Mercury: Next Steps

- Total Maximum Daily Load (TMDL) Implementation Plan
- New & Expanding Sources
- Mercury Control Technology Development
- Regional, National, International Reductions Needed

Fibers & Health Issues

- Fibers Present in Some Ore
- Health Studies Underway
 - Health Based Standard Development
 - Taconite Worker Health Study

Major Water Issues

- Sulfate Discharges
- Acid Mine Drainage
- Inter-Basin Water Transfer
- Mercury

Sulfate

- Sources
 - Wet Air Pollution Control Equipment
 - Mine Pit Dewatering, Basin Seeps
- Issues
 - Wild Rice
 - Mercury Interaction

Acid Mine Drainage



Inter-Basin Water Transfer

- Great Lakes Basin Compact Precludes Transfer of Water Between Basins
- Several Basins Meet on Iron Range
- Mining Facilities Must Watch Potential Transfers

Summary

- Existing Rules, Regulations Make Permitting (Appropriately) Difficult
- New Regulations, Issues Continue
- New Projects Proposed
- MPCA Working on Creative Solutions