

A Safe Ice Road Season



Welcome

Agenda

- **Goal – Zero Incidents**
- **Intended Use & Stakeholders**
- **Chronology of an Ice Road Season**
- **Communicate**
- **Communicating the Rules of the Ice Road**
- **Monitor the Use of the Ice Road**
- **Summary**

Planning for a Safe Ice Road Season

#1 Goal – Zero Incidents

Foundation to Achieve Zero Incidents

- Early Planning and Communication
- Understand Intended Use and Schedule
- Review Early and Often



Stake Holders, Landowners and Users

- Who are we building the ice road for ?
- Different groups have different requirements
- What are their primary and secondary requirements for access and use ?
- Take time to understand the "work" that will utilize the ice roads
- Actively communicate with the user group Early and Often

Permitting

- **Once the Scope is Established - Plan for More**
- **Engage with Agencies and Landowners Early**
- **It is prudent to permit additional ice roads and pads**
- **Think 'More' – If in Doubt.... Permit 'IT'**
- **Clearly Describe the Plan of Operation**
- **Anticipate the 'least likely' within the Plan – It Will Happen**

Ice Road Season Chronology

January – March – One year before the Season

- **Establish Schedule Milestones –
Ice Road Construction Start
Ice Road Construction Complete
Ice Road Open for Use**
- **Establish Requirements for Pre-Staged Equipment**
- **Early ice road access/completion drives the requirement for pre-staging equipment for an earlier start**
- **Engage with Agencies and Landowners**

Chronology Cont'd

April – One year before the Season



- Pre-Stage required equipment
- Utilize approved tundra travel equipment
- Utilize Previous year ice road
- Schedule helicopter time for upcoming summer
- Schedule surveys – Land & Archaeological

Chronology Cont'd

July – August – Summer prior to the ice road season

- **Actively Engage with Agencies & Landowners**
- **Survey routes for the ice road**
- **Obtain archaeological clearance**
- **Route around ponds greater than 2 feet deep**
- **Coordinate with Agencies for specific requirements**
- **Confirm stream crossing requirements with Agencies**

Chronology Cont'd

September – October – before ice road season

- Kick-Off Meeting with Owner & Contractor Reps
- Discuss Health, Safety, & Environmental Goals and Requirements
- Establish Roles: Responsibilities & Accountabilities
- Establish Communication Contacts and Protocols
- Establish Schedules for Success – Realistic
- Communicate Schedules – Ice Road Openings



Chronology Cont'd

Example of Schedule:

- **Pre-Stage Equipment (if req'd)** Apr 21, 2009
- **Start Pre-packing** Nov 1, 2009
- **Obtain site-specific access Approval** Nov 30, 2009
- **Start Ice Road Const** Dec 1, 2009
- **Ice Road Complete** Jan 15, 2010
- **Mobilize Equipment** Jan 16, 2010
- **Maintain Ice Road Access thru** Apr 24, 2010
- **Commence Close-out** Apr 25, 2010
- **All Ice Roads Closed** May 1, 2010

Chronology Cont'd

November – December – Start of Ice Road Season

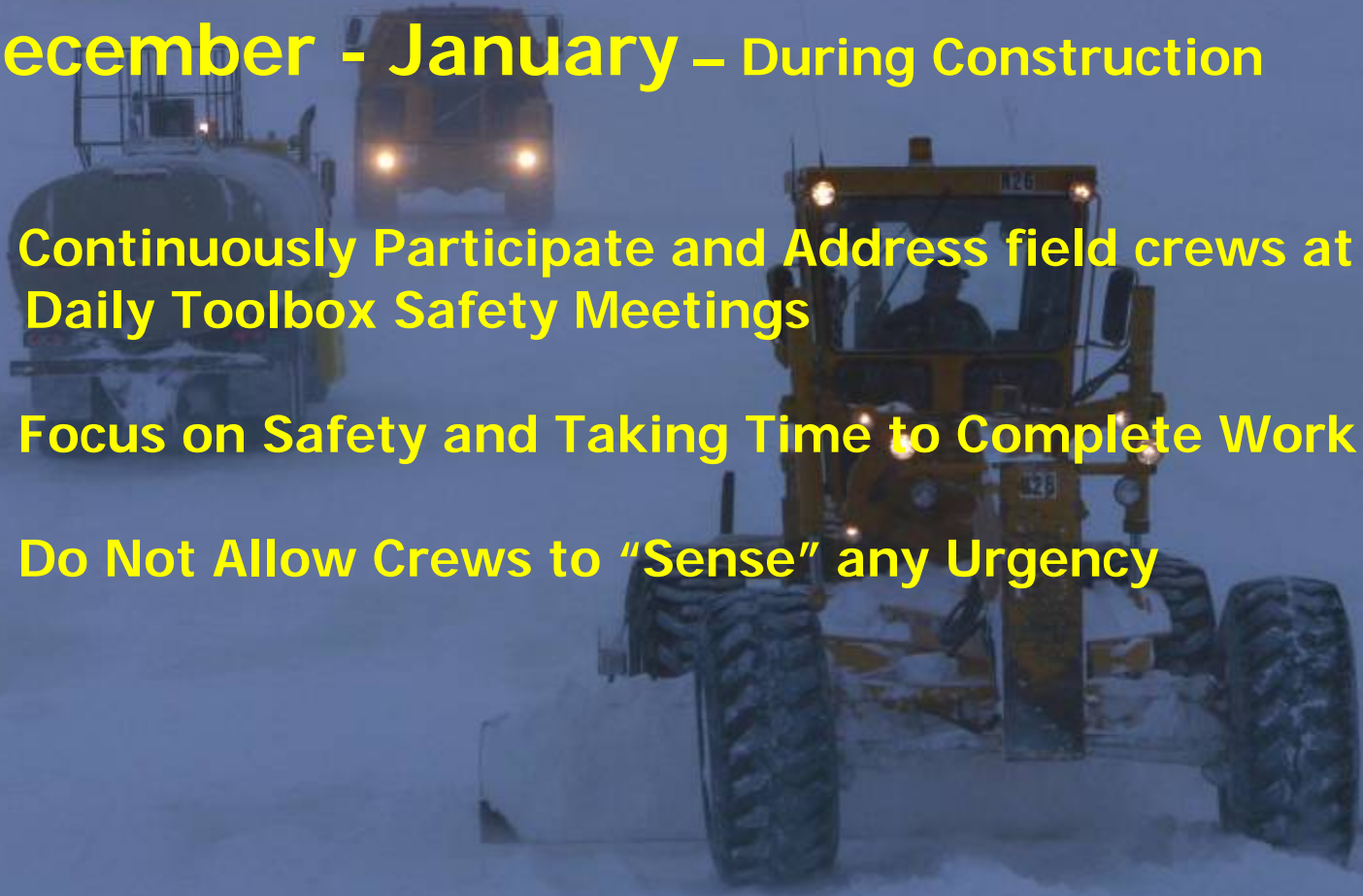
- Address ALL Field Crews on Site
- Establish First Priority of "Safety and Environment"
- Present "Zero Incident Culture" to ALL Personnel
- Address to Crews:
- "Take Time to Do the Work Safely and in an Environmentally Prudent Manner"



Chronology Cont'd

December - January – During Construction

- **Continuously Participate and Address field crews at Daily Toolbox Safety Meetings**
- **Focus on Safety and Taking Time to Complete Work**
- **Do Not Allow Crews to “Sense” any Urgency**



Chronology Cont'd

January – April – During Operations & Maintenance

- Continuously Communicate with Operations, Users, Security & Maintenance Crews
- Focus on Safety and Communicate ALL Concerns with Everyone
- Communicate the “Rules of the Road”

Ice Road Safety Rules

(Best Practices)

- Prior to travel check Fuel, Radios, Lights, Weather Advisories and Status
- Prior to accessing ice roads – complete a 360 of equipment – look for drips/leaks
- All vehicles/equipment are required to have and utilize secondary containment (duck ponds) while parked on ice pads/roads
- Maximum speed limit is 35 mph
- 15 MPH on Curves and Dips
- 15 MPH on Ice Bridges—Colville River 100 yd minimum between vehicles
- 5 MPH in Construction Zones where Personnel are on road and on Alpine Pad
- Working Heavy Equipment has the Right-of-Way – slow to 15 MPH when passing
- Be aware of shared roadway with Heavy Equipment on the Ice Road System

Ice Road Safety Rules – Cont'd

- All traffic entering the ice roads and Alpine must check in with Security
- Slow Down in rough sections, dips, or on areas with newly applied water
- Drive to Conditions – Reduce speeds for lowered Visibility, Slick Ice & Darkness
- Obey all Traffic Signs and Instructions from Security
- All traffic must come to a complete Stop at all Intersections
- Stay on the Roads – Never travel outside delineators
- Always carry sufficient Survival Gear, Food, and Water
- Safety Glasses and Seatbelts must be worn at all times
- Use Headlights and Turn Signals at all times
- Pay attention to Foul Weather Advisories from Security
- Use of Duck Ponds is mandatory – Spill Kits must be carried
- Report all vehicles that are off road and do not attempt to pull out without proper help to minimize Tundra Damage
- Be sure Radios are Operational – Note channel change signs along route



Common Theme

Communication

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Stress this with Your TEAM !

The Basics

- **Planning and Building the 'Correct' Ice Roads and Pads takes Effort**
- **Do Not Underestimate the Requirements**
- **Anticipate Accelerated Schedules – It WILL Happen !**



Managing the Use

- **Recognize the User Groups – and Communicate with Them**
- **Establish Security and Communication Protocols**
- **Check – Points: Allow Active Management of Use**
- **Apply Security / Surveillance Patrol as Appropriate**
- **If You Build It – They Will Come**

Summary

- Review the 'Typical Ice Road Season Chronology'
- Communicate with: Stakeholders, Landowners & Permitting
- Review Requirements: EARLY & OFTEN
- Establish a 'Realistic Schedule'
- Plan for 'SUCCESS' – Do Not Over-Commit
- Manage the Use – Actively