






# 23/24 Seasonal Safety Plan

Rev. 2019-005.3

|                          | Signature   | Date         |
|--------------------------|---|--------------|
| Principal Investigator   | <br><small>Kael Hanson (Mar 8, 2022 10:43 CST)</small> | Mar 8, 2022  |
| Project Manager          |    | Mar 17, 2022 |
| Quality & Safety Manager |   | Mar 8, 2022  |

## Change Log

| Revision | Description : Author                        | Date       |
|----------|---|------------|
| 1        | Original release of simplified plan.        | 04/25/2019 |
| 2        | Minor updates for 20/21 season. maz         | 03/09/2020 |
| 3        | Revisions for the next drilling season. maz | 02/28/2022 |
|          |   |            |
|          |   |            |
|          |   |            |
|          |   |            |

Forward:

We have taken the Lessons Learned from GEN 1, along with all of the positive Safety outcomes and incorporated this input into the 23/24 Seasonal Safety Plan. Please see the attached spreadsheet for the details of the plans. Please review the IceCube Upgrade Safety Manual in order to understand how we will implement and operate our Safety Programs.

### **IceCube Upgrade Training at PSL, August 2023**

1. SafeStart Training for All on Ice- “Keep your Head in the Safety Game”
  - a. “Also, watch each other’s back!”
    1. SAFETY CONTACT
2. General/ Job Specific Training
3. Review: Incident Reports/Current Hazards Analyses
4. Miscellaneous Safety Training:
  - a. MDS Ventilation
  - b. Personal Protection Equipment: Availability and Use.
  - c. Fire Safety: Evacuation Procedure
  - d. General Hazards
  - e. Fire Extinguisher Use
5. Advanced Safety Assessments: informal audits to increase Safety Awareness
6. METRICS: Days without a Lost Time Injury and days without an OSHA Reportable Injury; OSHA Reportable Injury (TRIR); Near Misses (See Plan)
7. Ice Safety Activities (See Plan)
  - a. Safety Issues will be discussed at all Shift Hand-Off Meetings.
  - b. Incident Reports will be used to track incidents to root cause and closure.
8. ASC/IceCube Upgrade
  - a. Walks Through/Drills (See Plan)
9. First Aid/CPR/AED Training. First Aid Training includes:
  - a. Hot Water Burns
  - b. Frostbite
  - c. Exposure
  - d. Altitude Sickness
  - e. Fatigue Management
10. ASC
  - a. Strong liaison with ASC EHS/Safety Officer
  - b. Common Safety Procedures: Fatigue Mgt., Emergency Protocols, OSHA Protocols
  - c. Joint Safety Meetings/Audits

While the Quality & Safety Manager has “Safety” in his title, you are still your own best Safety Manager. How effectively you can realize the Hazards in your area, and what you do about them will directly determine your own level of Safety.

## Safety Plan Tracking - Pole Season 23/24

Modified 10/28/08

| L3 Category    |                     | Team Members/ Auditors                                    | Inst.         | Days On Ice              | On Ice     | Off Ice      | Week starts on: | Week starts on: | Week starts on:                | Week starts on: | Week starts on: | Week starts on: | Week starts on: | Week starts on: | Week starts on: | Week starts on: | Week starts on: | Week starts on: | Week starts on: | Week starts on: | Comments |                 |          |
|----------------|---------------------|---|---------------|--------------------------|------------|--------------|-----------------|-----------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------|-----------------|----------|
|                |                     |   |               |                          |            |              | 11/13/23        | 11/20/23        | 11/27/24                       | 12/04/23        | 12/11/23        | 12/18/23        | 12/25/23        | 01/01/24        | 01/08/24        | 01/15/24        | 01/22/24        | 01/29/24        | 02/05/24        | 02/12/24        |          | 02/19/24        | 02/26/24 |
| ENGR           |                     | TBD   | UW            |                          |            |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| Safety Mgr.    |                     | Zernick, Michael  | UW            |                          |            |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| ENGR           |                     | TBD   | UW            |                          |            |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| Drill Mgr.     |                     | Duling, Dennis  | UW            | 96                       |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| Drilling       |                     | TBD   | UW            | 95                       |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| Drilling       |                     | Kalin, Jonas  | UW            | 99                       |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| Drilling       |                     | Birritelli, Barb  | UW            | 96                       |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| Drilling       |                     | Tosi, Delia   | UW            | 76                       |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| Drilling       |                     | Hamilton, Darryl  | UW            | 99                       |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| M&O Lead       |                     | John Kelley   | UW            | 99                       |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| Drilling       |                     | Gibson, Dar   | UW            |                          |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| Drilling       |                     | TBD   | UW            |                          |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| Drilling       |                     | TBD   | UW            |                          |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| Drilling       |                     | TBD   | UW            |                          |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
| Drilling       |                     | TBD   | UW            |                          |            |              | On Ice          | On Ice          | On Ice                         | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          | On Ice          |          |                 |          |
|                |                     |   |               |                          |            |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
|                |                     |   |               |                          |            |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
|                |                     |   |               |                          |            |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| 1              | On Going - Weekly   | Advanced Safety Audits                                    | IceCube       | Specialized              | On-Going   |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          | Site Leads      |          |
| 2              | On Going - Weekly   | Weekly Safety Action Meetings at each site                | IceCube/ASC   | Specialized              | On-Going   |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          | Site Leads      |          |
| 3              | On Going - Weekly   | Monthly IceCube Safety Meeting                            | IceCube/ASC   | Specialized              | On-Going   |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          | On-Ice Lead     |          |
| 4              | On Going - Weekly   | Incident Reporting Process                                | IceCube/ASC   | Specialized              | On-Going   |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          | Site leads      |          |
| <b>METRICS</b> |                     |   |               |                          |            |              | 11/13/23        | 11/20/23        | 11/27/23                       | 12/04/23        | 12/11/23        | 12/18/23        | 12/25/23        | 01/01/24        | 01/08/24        | 01/15/24        | 01/22/24        | 01/29/24        | 02/05/24        | 02/12/24        | 02/19/24 | 02/26/24        |          |
| 1              | Hi-Level            | Days without a Lost Time Injury                           | IceCube       | Specialized              | On-Going   |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          | Site leads/ MAZ |          |
| 2              | Hi-Level            | Days without an OSHA Reportable Injury                    | IceCube       | Specialized              | On-Going   |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          | Site leads/ MAZ |          |
| 3              | Hi-Level            | OHSA Reportable Injuries/TRIR                             | IceCube       | Specialized              | On-Going   |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          | Site leads/ MAZ |          |
| 4              | Controllable        | Near Miss Occurrences                                     | IceCube       | Specialized              | On-Going   |              |                 |                 |                                |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          | Site leads/ MAZ |          |
| Task #         | Task type           | Task  | IceCube / ASC | Gen. Asst. / Specialized | Plan Start | Actual Start | Plan Finish     | Actual Finish   | Resources                      |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| 1              | Preparation / Setup | Drill Equipment/ Process Start-Up Safety Check            | IceCube       | Specialized              | 11/11      |              | 02/03           |                 | Drill Shift/Deputy Shift leads |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| 2              | Preparation / Setup | Check and Weigh Fire Extinguishers/Fire Suppression Tanks | ASC           | Specialized              | 11/12      |              | 11/17           |                 | MAZ                            |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| 3              | Preparation / Setup | Fire Team Walk-through                                    | IceCube/ASC   | Specialized              |            |              | 11/25           |                 | Drill Shift Lead/ ASC          |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| 4              | Preparation / Setup | E-Stop Testing  | IceCube       | Specialized              |            |              | 12/04           |                 | Drill Shift/Deputy Lead/ MAZ   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| 5              | Preparation / Setup | Smoke/CO Monitor testing                                  | IceCube       | Specialized              | 11/12      |              | 11/23           |                 | Drill Shift/Deputy Lead/ MAZ   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| 6              | Preparation / Setup | Mass Casualty Drill                                       | IceCube/ASC   | Specialized              |            |              | TBD             |                 | ASC/ IceCube                   |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |
| 7              | Shutdown            | Drill Equipment/ Process Winterization Safety Check       | IceCube       | Specialized              | 1/20       |              | 01/27           |                 | Drill Shift/Deputy Shift leads |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |          |                 |          |

**Safety Goals: ZERO Lost man days due to accident or injury: ZERO OSHA Reportable Injuries**


# 23-24\_Seasonal\_Safety\_Plan\_2019-005

Final Audit Report

2022-03-17

|                 |  |
|-----------------|--|
| Created:        | 2022-03-08                                   |
| By:             | Mike Zernick (zernick@wisc.edu)              |
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