# APPENDIX J: Study timeline

#### June 2010

- 6-2 Kickoff meeting
  - Employees at SMR
    - 60-65 total
    - 10 drivers local 174
    - 4 crane operators local 302
    - 39 local 117 members, yard workers
    - 5 night maintenance employees
    - 60-70% Spanish language only
  - o Participating in L&I consultations closing conference scheduled for 6/17/2010
  - Biannual blood-lead levels for most "exposed" employees
  - o Four accidents in 2010
    - Two 1-2nd degree burns
    - One laceration and one hernia.
      - Only one accident resulted in a time off.
- 6-21 SMR safety orientation for UW staff (walkthrough facility)
- 6-24 HSC meeting.
  - o Initial meeting took place in the lunchroom.
    - UW presented the description and goals of the project (translation available).
      Meeting conducted in English only.
    - Local 117 represented
  - Group dynamics were limited to going around the table and ask people if they have some safety issue to discuss.
    - "Ongoing issues/difficulties with changing attitudes safety "shrugged off" by coworkers, employees." Supervisor
    - "some places you have to retrain the worker every day" one conversation not enough to change behavior – needs reiteration." Supervisor
  - Owner and operations manager were part of the group but did not contribute to the discussion, manager spent time taking notes-not included in minutes.
  - Meeting was led by safety director, agenda included past items as part of the continuous discussion during the meeting.
    - Safety issues remain in agenda for many months
    - Typically up to 9 accidents this time of year—
      - 3 of those serious/with time loss
      - Only 3 injuries so far this year
      - Burn in shop miscommunication
      - Burner burned by metal piece flew up, hit neck
      - Worker in warehouse was disassembling garage door frame- bending by hand – was cut

- July annual LOTO review (planned but not completed)
  - Safety committee will be visiting various operations (shearer, bailer, shredder) will investigate for proper LOTO procedures, document findings
  - Safety director often rechecking LOTO procedures on shredder is being done correctly
- L&I Consultation
  - Initial consult 62 items to be addressed, only 1 or 2 remaining
  - Closing meeting early July
- HSC elections before next month
  - More opportunities, somewhat more of a commitment for members
  - Monday will post a notice on the board for nominations for HSC

### July 2010

- 7-21 HSC pre-Training (10-11:30)
  - Local 117 represented
- 7-26 Blood lead testing begins.
  - Letters with results expected to reach workers-
    - Not all workers tested received results-letters (results in English).

#### August 2010

- 8-5 Start of observation trial-runs
- 8-15 Death of SMR VP
- 8-26 HSC meeting canceled

### September 2010

- 9-2 HSC meeting
  - HSC member recruitment and consent
  - HSC member surveys
  - o Local 117 represented
  - New elected/selected members attending
  - o Review of roles/responsibilities of HSC
  - Safety director states that each member represents work area and their health and safety issues/concerns
  - o Reminder that focus needs to be on safety issues rather than personal/personnel issues
    - "what happens in here, stays in here" open forum, focused on safety confidentiality
    - Drop in accidents/incidents-
      - 16 accidents this time last year
        - o 4 time-losses
        - 4 this year and one time-loss
    - LNI consultation completed, report received will share after management review
    - Importance of attendance, bringing issues from workers/work area to committee meetings

- Suggestion box will be set up in worker's lunch room
- After discussion between operations manager and the owners
  - VP will no longer sit on the committee operations manager will be the management's representative
- 9-8 Worker recruitment.
  - Groups throughout the facility were gathered to receive information from UW staff about "inform-consent" (English and Spanish) forms were signed.
- 9-13 Baseline assessment
  - Noise & Air sampling,
  - Worker surveys
- 9-17 First meeting with Facilitator

#### October 2010

- 10-5 Observations data collection begins
- 10-7 HSC meeting setting dates for training
  - Training Sessions agreement:
    - Two 4-hour sessions on consecutive Thursdays,
    - Beginning at 2 PM and ending at 6 PM.
  - Operations manager confirmed that this activity could take place during work hours on Thursdays at the end of October or early- to mid- November
  - Group was very interactive overall,
    - Spanish speaking workers were generally silent
    - More solutions/suggestions were proposed by workers and management
  - Safety director was writing down new concerns
    - unclear what the plan was to follow-up with items
- 10-18 Sampling, worker surveys completed
- 10-20 Shredder projectile hit maintenance building.

### November 2010

- 11-4 First HSC training
- 11-14 Near miss incident with front-loader and customer
- 11-15 Front-loader operator confirmed Shop Steward for Local 117
- 11-18 Second HSC training
- 11-27 Crane operator out with back injury (HSC member)
  - o unclear whether work-related
  - o unable returned back to work as 12/2011
- 11-29 Worker injured by forklift
  - o EMS call: emergency room for broken foot-
  - o investigation by Safety Director & HSC member

#### December 2010

- 12-2 HSC meeting
  - UW presentation of results, priorities handout.
  - The meeting attended by all members, the list of priorities is the tally of what members' voted to be priorities based on the list created during the HSC training.
    - 1) Regular meetings;
    - 2) HSC participation in inspections and walkthroughs;
    - 3) Meetings with management;
    - 4) Newsletter;
    - 5) Arrange for translation;
    - 6) Meetings should be longer;
    - 7) Agenda should be handed in advance.
  - Baseline results of exposure assessment of SMR
    - Printed report handed to all HSC's members containing the results of the exposure assessment (English/Spanish)
  - o Report on accident and injury involving forklift in Bailer area (11/29)
    - One worker/fractured ankle.
    - Accident was the result of leaving the forklift unattended without engagement of the parking brake.
    - 911 was activated, ambulance took worker to ER.
    - Operator who left the vehicle is on suspension
- 12-5 Meeting with UW engineering about traffic assessment project
- 12-15 Meeting with Safety Director at UW manager's asking for revised report
  - Proposed dates for HSC meeting (12/21,22,23)
  - Weekly safety inspections started
  - Tentative agenda items
    - HSC: Roles and Responsibilities
    - HSC Ground rules
    - HSC: Charter
- 12-29 HSC meeting cancelled
- 12-24 Owners release internal/private memo requiring biweekly safety meetings—
  - Conversation at the Managers meeting and recorded in the meeting minutes, but is not a policy nor we have access to the meeting minutes

# January 2011

- 1-5 Traffic assessment at SMR initial walk-through
- 1-5 Templates: Agenda/Minutes provided to Safety Director
- 1-5 Templates: Roles and Responsibilities to Safety Director
- 1-5 initiated regular scheduled meetings with Safety Director (at UW e/2 weeks)
- 1-12 Met with Safety Director and discussed implementation of new agenda format & support strategy

- 1-14 Meeting with Safety Director: Charter and Roles and Responsibilities
- 1-20 HSC meeting cancelled
- 1-25 Meeting with Local 117 at Local 117 copy of report to Local 117 representatives
- 1-26 Meeting with Safety Director at SMR-Review training priorities/toolbox
- 1-27 Initial assessment report to Safety Director
- 1-27 HSC meeting canceled—
  - updated reports handed out
  - Plan for 2 meetings in Feb.

#### February 2011

- 2-2 Meeting with Safety Director cancelled
- 2-7 Blood lead results still pending
- 2-8 Roles and Responsibilities Spanish to safety director
- 2-10 Meeting with Safety Director cancelled
- 2-10 Meeting with Local 117, UW and SMR workers at local establishment
- 2-16 Meeting with Safety Director at UW—
  - Traffic recommendations
  - Walkthrough inspection to take place with HSC member (Maintenance area)
  - Accident investigation training—TBD (April 2011)
- 2-21 Shredder projectiles
  - Hit and broke front loader right side windshield
    - One month without glass replacement.
- 2-22 UW Email to union and Safety Director pushing HSC progress
  - negative reaction of SMR owners
- 2-24 HSC meeting cancelled
- 2-24 Blue Card (hazards) to Safety Director (Spanish)
- 2-25 Hazard ID cards/box placed in lunch area
- 2-24 Safety Director hazard inspection with HSC member in maintenance area
  - prior to official training
- 2-25 Panels in Shredder identified missing (2 months) due to maintenance
- 2-25 Traffic assessment at SMR
  - worker/management surveys/interviews
- 2-25 Blood lead testing results pending
  - Workers have not received information on results
- 2-25 Meeting at Local 117 with Brenda-go over the report and future involvement

# March 2011

- 3-03 HSC meeting at SMR—attended by Local 117
  - Introduction of incident report form
    - Will report back list corrective actions
    - Will be implemented on 3/7
    - Will train workers during biweekly safety meetings

- Priority issues
  - Blood lead level results
  - Workers have not received BLL results in last couple years
  - Safety Director thought results would be sent from contractor
  - Safety Director will make sure workers get copies and help workers understand results – Spanish letters if needed
  - Shredder guarding
    - Earlier there were missing panels from shredder curtain
    - Shredder panels missing mid-January working on plan to inspect regularly
    - Front-loader operator: broken window from ejected material (2/21)
    - Operations Manager asked if more guarding was needed Safety Director "to look into it."
- 3-07 Pilot observations continue
- 3-08 New staff hired
  - o welder, laborer (night), maintenance
- 3-10 Meeting with Safety Director at UW-
  - Minutes posted glass case
  - Walkthrough NF2 inspection with HSC member, final report pending.
  - Hazard inspection training sessions (3/15 English and 3/22 Spanish)
    - Presentation to be translated into Spanish.
  - Ongoing challenges:
    - Management commitment to time for training.
    - Safety Director's ability to pursue safety agenda with management support.
    - Language and cultural barriers for communication.
    - Local 117: involvement/participation: agreed in positive contribution by increased involvement, although a distinction between "safety" and "labor" issues are needed to be clear.
    - Needed a P/t bi-lingual safety coordinator
- 3-14 Blue cards: "There is no eye wash station in the shredder area for the last 10 months."
- 3-15 Inspection training at SMR English speakers
  - Identify hazardous and unsafe conditions
  - Corrective actions (Person responsible/date for completion)
- 3-17 New workers (pickers) assigned to sorting area outside shredder –ASR front loader
- 3-21 Final translation Inspection Training -Spanish
- 3-22 <u>Inspection training at SMR Spanish speakers</u>
- 3-24 HSC meeting cancelled
- 3-18 Meeting with Safety Director at SMR
  - o Blood lead results letter-Spanish-
  - Accident investigation training-postponed (April 2011)

- 3-19 Blue Cards: "bobcat in the shredder area requires regular window cleaning maintenance."
- 3-29 Revised Assessment report handed to HSC members
- 3-31 HSC meeting
  - Mission Statement for the H&S Committee
    - Complete mission statement
    - Discuss how to proceed with roles/responsibilities
    - Breakout session for charter development

### April 2011

- 4-1 Blue Cards: "Potholes in the truck yard loading area-these potholes are a hazard when loading/unloading with the forklift."
- 4-4 Mobile Hearing test scheduled
- 4-5 Pilot observations continue
- 4-21 Translations completed:
  - Blue cards,
  - Traffic summary
  - Blood-lead
  - Hearing protection
- 4-26 Meeting with Safety Director at UW—cancelled
- 4-27 Finalized Mission statement
- 4-28 HSC at SMR-adoption of Mission statement
  - Local 117 present
  - o Back strain in warehouse (NF1) trying to move something too heavy
  - Toolbox Training materials:
    - Supervisor concerned about being specific to area good to have all workers on same page, but still needs to be applicable
  - o load of cars fell off trailer, no injuries
    - Safety Director wants to know ASAP about accidents injury or not.
- 4-28 Translation Hearing results letter/Spanish
- 4-28 Accident investigation training-postponed (May 2011)

# May 2011

- 5-3 Traffic report to Safety Director
- 5-9 Roles & Responsibilities final translation-Spanish
- 5-09 Meeting with Safety Director at SMR
- 5-12 Traffic Study presentation at SMR with HSC.
  - HSC agreed to move forward in the formal process of approval and Safety Director to move forward to management.
  - HSC approval of basic traffic recommendations next. (6/27)
- 5-16 Blood lead results letter/Spanish
- 5-17 Accident Investigation training presentation/translation Spanish

- 5-19 Meeting with Safety Director at SMR-finalize Roles & Responsibilities/English/Spanish
- 5-26 Meeting with Safety Director at SMR-
  - Toolbox training content, process and evaluation
    - 13 Topics
    - Train/trainer sessions
    - Evaluation/observations
  - Accident Investigation training postponed (June 16 & 22, 2011)
- 5-31 Meeting with Safety Director-Photos, toolbox training materials (ISIS)

#### June 2011

- 6-14 Meeting with Safety Director at SMR-present toolbox training materials (hearing protection)
- 6-16 Training Accident Investigation canceled-English
- 6-22 Training Accident Investigation canceled-Spanish
- 6-24 Meeting with Safety Director at SMR-review toolbox training materials
- 6-30 HSC meeting
  - o UW Presentation: Traffic Assessment at SMR
  - HSC opportunity to make decision to approve "Traffic Study" findings and develop written recommendations to management.
    - Certification for traffic controllers,
    - Reflective clothing,
    - Road markings
    - Management/HSC/Safety Director— will discuss writing recommendations to management at next meeting
  - Traffic recommendations approval from HSC
  - o intro to Toolbox Safety training
  - Accident investigation training postponed (7/2011)

# July 2011

- 7-01 Workers 4<sup>th</sup> July lunch at SMR-UW invited.
  - T-shirts: "safety starts with you"
- 7-01 Safety Director submits list of Traffic Recommendations to management
- 7-12 Meeting with Safety Director at UW-
  - Scheduling/coordinating toolbox training/train/trainer schedule
- 7-15 Ejected projectile metal piece from shredder to unloading zone
  - Hit one worker in the rib cage, no medical attention required
- 7-18 HSC rep from Maintenance resigned-new job offer(last day 7/21)
- 7-19 Meeting with Safety Director
  - Take pictures of Traffic Revision project (before/after documentation)
  - Established the date for the upcoming "train/trainer" toolbox training (7/21)
  - Tentative HSC elections
    - Areas not currently represented: maintenance, night-shift, and NF1

- 7-25 Local 117 site visit (anonymous request)
  - Assessing the current location of the main propane tank that serves as a pump station for forklifts that is located 25.5 feet away from the stainless steel "cutting" area.
    - The previous week a forklift damaged the hose that is used for filling the gas and causes a leak that let gas scape near the "stainless steel" cutting area.
    - One of the supervisors was near and alerted the cutter and one of the workers in the bailer area shut off the valve.

# • 7/28 HSC meeting

- Reiteration on behalf of the owners bi-weekly meetings "important" to continue as scheduled.
- Accident investigation training postponed (8/2011).
- o Traffic training (Evergreen Council) pending.
- o Pavement/concrete to fix the roads to be done during the summer (not completed).
- o HSC discussed replacing missing HSC members
- Operations Manager announced that the shielding for the shredder will be installed in the next few days...worker hit by projectile in the prior week.
- o Workers request availability of drinking water during the hot days.
- New workers assigned to shredder outlet-no safety assessment performed, procedures pending.
- LP tank issue: re-locate LP tank outside NF2 due to danger near stainless steel burnerowner to make a decision
  - No changes, no decision was made,
  - Operations manager reported that there no violations and re-location would be costly).
  - Traffic recommendations officially approved, provisionally but not in writing.

### August 2011

- 8/1 Meeting with Safety Director at UW to go over the toolbox-"train/trainer" schedule.
  - Spanish will take place on 8/4 (11-12)
  - o English 8/11 (11-12)
- 8-04 Train/trainer session (Spanish) "Toolbox Materials"
- 8-15 Shared "toolbox" materials with Local 117
- 8-18 Scheduled train/trainer session "Toolbox Materials" for HSC members (English)
- 8-19 NF1 & NF2
  - Initiated training by presenting "What to do if you see a hazard."
    - No evaluations were conducted.
    - Positive feedback from both presenters,
    - Workers were enthusiastic to hear the information in new format.
    - Opportunity for workers to share safety issues in their area
- 8-23 Weekly meeting with Safety Director.

- Agenda for HSC meeting
- Schedule toolbox training for all areas
- New Local 117 representative invited to attend HSC meetings
- 8-25 HSC meeting:
  - Schedule bi-weekly area safety meetings: "toolbox training."
  - Assign supervisors to deliver and support each of the trainings staring in September 1<sup>st</sup>
    - Calendar to be sent by Safety Director.
  - Burner asks that we talk to all forklift drivers and let them know they need to signal him before they fuel their forklifts, so that he may stop torching before they start fueling their equipment.
  - NF2 Lead states that employees in his area are telling him the baler pit has a very bad odor and it seems to be getting worse.
  - Truck driver states that drivers have complained on several occasions about the poor condition of several roll-off containers.
    - They would like some system or protocol for inspecting boxes and have corrective actions to be prompt.
  - NF2 employees want to know if and when we may be moving the LP fuel tank?
  - o Several complaints on the ACP surface conditions, specifically at the RR tracks.
    - These areas have gotten worse and are unsafe to travel across with a loaded forklift.
  - When will we start carrying out the approved items in the committee recommendations to management?
    - Specifically the pavement markings, traffic control training, and signs?
  - Safety Director designated NF1 supervisor to take minutes
    - Minutes not published
  - Accident investigation training postponed (9/2011)

# September 2011

- 9-1 "Toolbox Training #1" ("Why working safely needs to be a priority")
  - 32 participants in the facility (NF1, NF2, Shredder, and Yard).
- 9-9 Weekly meeting with Safety Director
  - "Lessons-learned" from first toolbox training sessions.
  - Ideas for breakdown groups,
  - feedback to presenters,
  - availability of materials,
  - schedule times
- 9-15 "Toolbox Training #2" ("What to do if you see a hazard")
- 9-20 Weekly meeting with Safety Director at SMR,
  - Evaluations from last training,
  - Develop feedback process for presenters.
  - Schedule "Accident Investigation" training (English/Spanish)

- 9-26 Weekly meeting with Safety Director at UW
  - Agenda and the minutes for the HSC (9/29).
  - Notify Local 117 of the upcoming HSC at SMR
  - Coordination of the post-project activities for the next 2 months (air sampling, observations, and surveys/interviews).
  - Reviewed "tool box safety talks" experience so far and plans to continue e/2 weeks.
  - Traffic
    - On-site classes for traffic controllers by Evergreen Safety Council-approved but pending implementation
    - Asphalt resurfacing postponed to 2012
    - Traffic signs purchased but not installed
- 9-28 HSC meeting.
  - o Reviewed "toolbox safety talk" feedback to presenters.
  - o Introduced new shredder supervisor as a new member representing Area 6.
  - o Reviewed "pending" safety issues (i.e. LP gas, Baler, Containers, ACP maintenance).
  - Next topic departmental meeting:
    - Issues regarding communication (updates) of process and safety issues to the workforce.
    - Operations manager commented that some of the fixes take time and people do not know the process, cost and effort needed to correct hazards.
    - Accident investigation training pending-possibly October.
    - Blood lead testing took place earlier this week.
- 9-29 "Toolbox Training #3" ("What to do when there is an injury")

### October 2011

- 10-05 Meeting with Local 117 representative at UW.
  - Debrief new Local 117 representative assigned to SMR about the collaborative project between UW/117/SMR.
  - Meeting with Safety Director @ SMR
    - Coordination of post survey activities, initiation of observations and
    - Coordination with supervisors for the second survey.
- 10-5 Second round of worker's interviews and observations begins.
  - o The goal is to complete the second survey with all the workers by the end of the month.
  - The goal is to complete 500 observations throughout the month of October and November.
- 10-6 "Toolbox Training #4" ("Language barriers and effective communication")
- 10-7 Safety Director gives notice to SMR management of his departure.
  - Safety Director last day is 10/21.
- 10-13 Safety meetings continue to take place in all areas using the "toolbox training" materials developed by the UW.
  - Next worker safety meeting to take place on 10/27.

- 10-14 Maintenance staff suffers injury to finger while attempting to test piston function inside crane's grapple.
  - o Suffered laceration requiring medical attention in the emergency room.
- 10-20 The HSC meeting normally scheduled on the last Thursday of the month was moved a week earlier in order to have Safety Director present and leading the meeting for the last time.
  - o The agenda:
    - 1) feedback from "safety toolbox" meetings from each of the presenters;
    - 2) Discussion about the next round of topics for the safety meetings;
    - 3) UW summary of status of data collection and project closure;
    - 4) Safety Director's replacement.
      - Operations manager self-designated chair of the HSC,
      - SMR looking for Safety Director
        - Operations manager and water treatment plant engineer to serve as interim safety contacts.
    - Issues raised by committee members:
      - 1) Levels of engagement vary, there is the consistent perception that not all areas are represented in the committee (e.g. Maintenance, NF1, Night shift);
      - 2) Need to develop specific safety topics for drivers;
      - 3) Credible corrective actions not being implemented and "it hurts" not only the committee's credibility, but also the overall perception on how SMR safety program effort and commitment.
      - 4) Good multi-lingual efforts, good content for the safety topics, but follow through has been poor and needs to improve before efforts will gain credibility among the workers.
      - 5) Management response: "many unseen efforts going on behind the scenes with regards to other pressing concerns-no concern goes ignored."
- 10-27 "Toolbox Training #5" ("How to protect yourself against hearing loss")
  - o Safety meetings take place in all areas,
    - Materials delivered by the UW and presented by HSC members in their respective areas.
    - Met with Local 117 representative at SMR,
      - Walkthrough the facility while collecting observations data
- 10-31 Completed 56 interviews (second round of worker interviews-post assessment survey/questionnaire).
  - o Post HSC member survey questionnaire distributed to all current members.

#### November 2011

- 11-8 Completed 525 worker observations.
  - Safety Toolbox materials delivered to Operations Manager to be distributed prior to safety talk to take place 11/10.
  - Collected 5 of the possible 8 HSC member survey/questionnaire.
- 11-10 "Toolbox Training #6" ("Working safely around moving vehicles")
  - Bi-weekly scheduled safety meetings (working safely around vehicles). (5th of 13 topics)
    - Assisted in the Shear-Yard presentation (12). NF1 (8).
    - Area 6 and shredder delivered by supervisor with the assistance of Spanishspeaking HSC's member.
- 11-14 In-person exit interviews with HSC members begin. Completed: NF1 supervisor.
- 11-21 Sent request to Operations Manager regarding OSHA logs for 2011, lead test results and injury rates for the last three quarters of 2011.
  - o No response.
- 11-23 HSC interview with HSC member.
- Approached by acting safety contact,
  - Discussed about the responsibilities of the former safety director regarding:
    - "safety talks" material, scheduling safety meetings,
    - External resources for safety training.
- 11-24 **HSC Meeting-cancelled** –postponed to 12/1/11.
- 11-27 E-mail reminders sent to acting safety director
  - o OSHA logs
  - Blood lead testing results
  - Response: we are looking; do not know where to find it.

# December 2011

- 12-1 HSC meeting-cancelled to 12/8
- 12-1 "Toolbox Training #7" ("Ergonomics: preventing strains and sprains")
  - UW present at "yard" area safety meeting—UW staff conducted presentation (12 workers)
- 12-7 "Toolbox Training #6" ("Working safely around moving vehicles")
- 12-8 HSC meeting postponed to 12/15 -due to conflict with SMR customer lunch.
- 12-10 Second request to obtain the blood-lead testing results
  - o Operations manager: need to find file
- 12-15 "Toolbox Training #8" ("Preventing slips, trips and falls")

### • 12-15 **HSC** meeting.

- Acting safety staff and operations manager leading the meeting.
- Review "toolbox" safety talks—taking place consistently, although scheduled meetings moved due to holidays.
  - "Safety talks" with specific topic reinforces HSC work.
  - Two-sided handout very useful.
  - New topics need to be developed –need ideas from each department around the specific safety issues that need to be reinforced.
  - Delivery of the safety talks needs to be more "conversational" and less "lecturing."
  - Minimum 20 minutes for "safety meetings."
  - Need to rely more in translation it helps to engage workers.
- o Issues: stacking up boxes in NF2-too high, no fixes until materials are sold.
- DOT: new form to inspect containers and to keep track of container damage and repair requests.
- HSC elections: to take place in 2012. OM open discussion for suggestions for the recruiting of new HSC members.
- o Forklift safety: review training materials and update schedules for refresher courses.
  - Visual test plus observations during work.
  - There is no formal training for bobcat operators. Need to develop "own" written and visual testing methods.
- OM: "experience rating" improvement from 17-19 "recordable" in 2010 to 8 in 2011.
- Injury: back injury-medical visit and 2 days loss. Worker attempted to lift and move heavy object without assistance.