



YCI Methanol One, LLC.

CONSTRUCTION ENVIRONMENTAL, HEALTH AND SAFETY (EHS) PLAN

YCI METHANOL ONE, LLC.

YCIM1-YCI-00-0000-HS-PLN-0008

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SYNOPSIS

This document presents the Construction Environmental, Health and Safety (EHS) Plan for the YCI Methanol One, LLC.. The Plan is used to detail the methods, systems and strategies to be implemented for successful execution of the project.

Disclaimer

This report has been prepared on behalf of and for the exclusive use of YCI Methanol One, LLC. and is subject to and issued in accordance with the agreement between YCI Methanol One, LLC. and Contractor.

YCIM1-YCI-00-0000-HS-PLN-0008		CONSTRUCTION ENVIRONMENTAL, HEALTH AND SAFETY (EHS) PLAN				
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1	Issued for Use	M. Breen PSM Manager	J. Bennett Construction Site Safety Manager	B. Kimbrell Site Manager	J. Anderson Construction Director	6/20/18

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1. PURPOSE AND SCOPE

It is an objective of YCI Methanol One, LLC to construct and start up the YCI Methanol One, LLC Project in a manner that protects the health and safety of employees and the community. To that end, YCI is committed to protecting the safety and health of employees by taking reasonable steps to eliminate or reduce the exposure of employees to conditions adversely affecting their safety or health while on the job.

YCI shall require measures that go beyond legal obligation if, in its prudent judgment, a higher level of controls is in order. To ensure continued success, YCI is committed to making continuous improvements in its health and safety program.

Requirements of this program apply to all personnel for construction-related activities at YCI St. James Project site.

2. RESPONSIBILITIES

2.1 SITE CONSTRUCTION MANAGER

The Site Construction Manager is responsible for implementing and enforcing this procedure.

2.2 SITE EHS MANAGER

The Site EHS Manager is responsible for monitoring compliance with this procedure.

2.3 CONTRACTOR

Contractors with significant scopes of work are required to develop a site-specific Construction Safety Plan with policies and procedures that effectively manage safety performance. The purpose of this manual is to provide minimum standards for contractor safety plans.

Contractors are required to submit their Site-Specific Safety Plans, Job Hazard Analyses (JHAs) and Industrial Hygiene (IH) plans to YCI for review prior to any contracts awarded/PO issued and project work beginning.

3. DEFINITIONS

Competent Person	One who can identify existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. [29 CFR 1926.32(f)]
Construction Activity	OSHA's regulations define "construction work" as "construction, alteration, and/or repair, including painting and decorating." [29 CFR 1926.32(g) and 29 CFR 1910.12(b)]
Control	To reduce exposure to hazards in accordance with an objective of furnishing a place of employment that is free from recognized, uncontrolled hazards that are causing or are likely to cause significant or serious injury or illness to employees and in accordance with regulatory and legal requirements

	to employees and in accordance with regulatory and legal requirements (including providing appropriate supplemental and interim protection, if necessary) to exposed personnel; substitution and elimination are considered superior to control.
Contractor	An employer who performs work for a host employer.
Environmental, Health and Safety (EHS) Huddle	Interactive meeting between a worker's direct supervisor and workers to discuss the JSA for the next work task or activity period.
EHS Stand Down	A site-wide EHS meeting to address EHS issues.
Employee	A person who works in the service of another person under an express or implied contract of hire, under which the employer controls work performance details.
Employer	A person or entity that has hired the services of workers; is entitled to rights according to the terms of contract; is bound to pay compensation as agreed.
Exposure	Reasonable likelihood for being subjected to effects of a hazard.
Hold Point	A point of defined circumstances (i.e. Excavation Permit) beyond which a construction activity must not proceed without the approval of a designated authority.
Imminent Danger	Any conditions or practices in any place of employment which are such that a danger exists which could reasonably be expected to cause death or serious physical harm or environmental impact immediately or before the imminence of such danger can be eliminated.
Job Hazard Analysis (JHA)	A work control document that identifies the work tasks, hazards and controls of the overall project and provides the basis for the development of the site-specific EHS safety.
Job Safety Analysis (JSA)	A detailed review of the day's work tasks to identify job steps, hazards and controls.
May or Should	Modifiers used to indicate a recommendation that is advised but not required.
Prevention Through Design (PTD)	Addressing occupational EHS needs in the design process to prevent or minimize the work-related hazards and risks associated with the construction, manufacture, use, maintenance, and disposal of construction materials and equipment.
Qualified Person	One who by possession of a recognized degree, certificate or professional standing or who by extensive knowledge, training and experience, has successfully demonstrated their ability to solve or resolve problems relating to the subject matter, the work or the construction project.
Safety Program or Plan	Procedures, methods, processes, and practices that describe the safety management system necessary to effectively control hazards of the worksite.

Serious Injury or Illness	An injury or illness that causes the employee to miss work days or results in fatality.
Severity	An overall perspective gained by assessing likelihood of employee exposure, seriousness of harm associated with the exposure, and number of exposed employees.
Shall or Must	Modifiers used to indicate a mandatory requirement.
Significant Injury or Illness	An injury or illness that causes the employee to be restricted in work activity or worse.
Site Safety Plan (SSP)	A document prepared by the contractor and submitted to YCI for review and concurrence which covers the contractor's environmental, health, safety and security procedures. The SSP describes the plan for a project and the activity job hazard analysis(es) for each definable activity/feature of work.
YCI Representative	Construction site manager, construction manager, construction coordinator or YCI-delegated representative authorized to approve and accept work, provide technical liaison, and interpret plans and specifications.

4. MANAGEMENT SYSTEM

4.1 MANAGEMENT OF SAFETY PROGRAM

To ensure adequate management of the safety program, contractors must:

- Establish a written site-specific safety plan. An objective of this plan is to furnish a place of employment that is free from recognized, uncontrolled hazards that are causing or are likely to cause significant or serious injury or illness to employees.
- Establish program responsibilities of managers, supervisors, and employees for safety and health in the workplace.
- Establish methods to hold managers, supervisors, and employees accountable for carrying out defined safety and health responsibilities.
- Establish an organization with safety and health technical expertise to support acceptable safety performance.
- Provide managers, supervisors, and employees with authority; access to relevant information; training; and resources necessary to execute defined safety and health responsibilities.
- Provide a method to systematically receive and respond to reports about workplace safety and health conditions and, where appropriate, to initiate corrective action.
- Establish methods for communicating procedures and obligations of the site-specific safety plan.

4.2 RESPONSIBILITIES

These responsibilities shall be considered for appropriate management personnel within the contractor organization:

- Ensure that employees are properly trained.
- Ensure programs are in place to adequately acclimate their employees, vendors and or suppliers to site rules and current phase of construction, and to provide mentoring when necessary.
- Ensure all employees are trained and follow the "Keys to Life" (See Appendix C).
- Provide a timetable for completion of safety-related commitments (tracking of incident investigation action items; execution of audits; worksite safety committee findings, etc.).
- Designate persons with the authority, resources, and information necessary to meet responsibilities assigned in this program.
- Ensure that management practices encourage and do not discourage adherence to the policies and procedures of this program.
- Communicate with employees regarding the implementation of this program to assure effective implementation.
- Review evaluations of this program and respond as necessary to ensure that this program remains effective.
- Ensure that affected employees are consulted in the development and implementation of this program.
- Ensure that this program is made readily available to affected employees.
- Ensure that safety incident reports are reviewed with affected employees.
- Ensure that a site-specific hazard assessment is performed prior to a job being performed or upon changing of a job's scope.
- Establish a safety organization that is compatible with the demands of the workforce.
- Establish a site-specific safety plan.
- Conduct program evaluations and maintain resulting reports on file.
- Update this program as necessary to ensure continued effectiveness.
- Conduct field audits to determine effectiveness of this program. Frequency will be set depending upon scope of work.
- Ensure that daily plans are properly employed.
- Ensure that employees properly perform procedures required by this program.
- Issue written reports as required.

4.3 CONTRACTOR RESPONSIBILITIES

These responsibilities shall be considered for workers within the contractor organization:

- Attend and actively participate in safety meetings.
- Report incidents.
- Report uncontrolled or inadequately controlled hazards.

4.4 CONTRACTOR'S ACCOUNTABILITY MEASURES

Contractors shall consider these accountability measures during development of a site plan:

- Ensure that incident investigation report recommendations are tracked to completion.
- Assign and communicate responsibilities for managing this program. Ensure that personnel are held accountable for assigned responsibilities.

5. CONTRACTOR EHS COVERAGE

Each contractor must allocate the resources necessary for implementing site specific environmental, health and safety requirements and associated permits as defined by this manual. Each contractor must:

- Provide qualified EHS representation for all tiered subcontractors added together. The requirements are as follows:
 - Less than 25 employees: The company must have a designated EHS representative. Minimum qualifications: OSHA 30 hour for Construction or EHS Trained Supervisor (STS) designation. This individual must be full time on the project.
 - 25 to 80 combined employees: 1 full time EHS representative. Minimum qualifications: OSHA 30 hour for Construction, or other recognized, accredited EHS designation such as Certified Health and EHS Technician.
 - 80 to 150 total employees: An additional full time EHS representative. Minimum qualifications: OSHA 30 hour for Construction or other recognized accredited EHS designation such as Certified Health and EHS Technician.
 - Over 150 employees: 1 additional EHS representative for each 100 workers.
 - Proposed EHS staff will be evaluated by YCI Methanol One, LLC. prior to mobilization.
- Contractor's Monthly Report will be submitted to YCI by the third (3rd) business day of each month using the YCI Monthly Report format as shown in Appendix A.

6. EDUCATION AND TRAINING

Training and education shall include procedures that are required by this safety manual and by the contractor's site-specific plan, and in other safety topics related to their work. Contractors shall establish methods to conduct a site-specific orientation for all workers prior to working in the construction area. Contractor shall establish methods to ensure that these minimum training standards are maintained: employees will be required to hold current Greater Baton Rouge Industrial Alliance Basic Orientation Plus (GBRIA BOP) training, OSHA 10-Hour Training, or equivalent; anyone within the safety organizations of contractor companies (excluding clerical staff) will be required to have current OSHA 30-Hour Training or equivalent.

Contractors shall establish methods to ensure that frequent meetings are conducted to educate employees on relevant safety topics.

Contractors must ensure that:

- Each employee has received Basic Plus Training (or equivalent), YCI specific training and contractor specific training for work at the YCI facility.
- Each employee is educated in the contents of in the site safety and health program.
- Each employee obtains skills necessary to execute procedures that are assigned in the site-specific safety and health program.
- Each employee is educated in hazards in which they are exposed is provided with information and training in that hazard.
- Each employee obtains skills necessary to execute procedures that are assigned in the site-specific safety and health program.
- Each contractor must ensure adequate tracking for employee training.
- Each contractor must have an adequate identification system for employees who have completed the required training.
- Each contractor is required to maintain current training records for all employees conducting work at YCI.
- Contractor supervision will be required to have OSHA 30-hour or equivalent training.

Contractors shall provide information and training in:

- The nature of the hazards to which the employee is exposed and how to recognize them.
- What method is used to control these hazards.
- What protective measures the employee must follow to prevent or minimize exposure to these hazards.
- The provisions of the site-specific plan.

Contractors shall provide information and training as follows: before initial assignment to a job involving exposure to a hazard; when assigned with program responsibilities; as often as necessary to ensure that employees are adequately informed and trained; and when safety and health information or a change in workplace conditions indicates that a new or increased hazard exists.

7. SUBSTANCE ABUSE

Contractors who perform work must follow the YCI Drug and Alcohol Abuse Prevention Program and Policy. YCI holds the right to conduct random searches.

Refer to the YCI Drug and Alcohol Abuse Prevention Program and Policy YCI-M1-YCI-00-0000-HS-POL-0003.

8. VIOLENCE AND WEAPONS

Firearms (except firearms carried by certified and trained guards or Police) shall not be permitted on any work premises. YCI Methanol One, LLC has developed and implemented a clear policy of **zero tolerance** for workplace violence, verbal and nonverbal threats and related actions including use of or possession of a firearm.

Workers will be held accountable for aggressive behavior. Workers are required to immediately report all "threatening" behavior to his/her direct supervisor who will then report it to YCI. All reports of aggressive or potentially violent behavior will be investigated and, if verified, appropriate responsive action will be taken. Such action could include:

- Monitoring of the situation.
- Taking appropriate disciplinary action, including termination.
- Warning of identified targets of the potential harm.
- Reviewing and, if appropriate, upgrading security measures.
- Consulting with local law enforcement officials.

Firearms, ammunition, or other weapons are prohibited. Knives are permitted to be carried but are not allowed to be used for cutting purposes during work hours. The proper cutting device is required, such as for example, wire cutters, nipper cutter pliers, etc.

9. EMPLOYEE PARTICIPATION

Contractors shall provide employees with opportunities for participation in establishing, implementing, and evaluating the safety plan by:

- Communicating with employees about workplace safety and health matters.
- Providing employees with access to relevant safety information; as required by regulatory standard and requirement per construction safety manual.
- Providing systematic methods for employees to become involved in hazard identification and assessment, prioritization of hazards, training, and program evaluation.
- Establishing systematic methods for employees to report job-related injuries, illnesses, incidents, near misses and hazards promptly and to make recommendations about appropriate ways to control those hazards.
- Providing prompt responses to such reports and recommendations.

To safeguard employee participation in the program, contractors must not discourage employees from making reports concerning any safety related incident or near miss.

10. HAZARD IDENTIFICATION AND ASSESSMENT

Contractors shall perform hazard risk assessments of the project prior to start of work and communicate results to YCI. These risk assessments may be qualitative or quantitative. In the case of initial quantitative hazard assessment, information from past work may be employed if methods, tools, and level of experience are consistent.

Once on-site work has initiated, contractors shall employ methods that systematically identify and assess hazards to which employees are exposed and assess compliance with the standards set forth in the site-specific safety plan by:

- Assessing hazards and instituting mitigation prior to starting each job.
- Conducting inspections of the workplace.
- Reviewing safety and health information.
- Analyzing incidents for systematic causes.
- Evaluating new equipment, materials, and processes for hazards before they are introduced into the workplace.
- Assessing severities of identified hazards that cannot be corrected immediately and ranking according to severity.

Contractors shall conduct the hazard identification and assessment process: initially; as often thereafter as necessary to ensure compliance with the standards of the site-specific safety plan; and when safety and health information or a change in workplace conditions indicates that a new hazard may be present or a greater severity hazard may exist than what was understood.

Contractors shall investigate safety and health events in the workplace when there is any combination of the following: a work-related death, a serious or minor injury or illness, a serious or significant fire, or an event that could reasonably have resulted in any of the events listed above.

Results of these assessments shall be used during the generation and/or updates of the site-specific safety plan.

11. HAZARD PREVENTION AND CONTROL

Contractors shall implement safety programs that systematically comply with the basic objective. As a minimum, the programs listed in Appendix B shall be implemented.

If it is not possible to comply immediately with a defined program requirement, contractors may implement interim measures to ensure adequate worker protection. Any deviation must be approved by site senior management.

Elements of contractor safety programs should be based on this hierarchy: Hazards shall be eliminated when feasible; when not feasible to eliminate a hazard, substitution, engineering or administrative controls shall be implemented; when not feasible to eliminate or control a hazard, PPE shall be used; if elimination, control, or protection is not possible, then the job shall be redesigned.

EHS activity briefing (huddles) must be held each day prior to the start of work activities, after mid shift break (lunch), at the end of shift for sign out, and anytime there is a significant change in work scope. Records for these briefings documenting the meeting content and attendance must be maintained. All crew members must acknowledge the information disseminated, by signing the Job Safety Analysis (JSA).

- EHS pre-task planning for the day's work activities.
- Changes in work practices or environmental conditions.
- Required equipment/system daily inspections.

- Previous day's incidents, near misses, lessons learned and/or other relevant issues, as applicable.
- Other ongoing activities that may have project EHS implications.
- New or modified site-wide procedures or requirements.

12. SAFETY COMMITTEE MEETINGS

Committees will be established and each contractor (regardless of level) will have a designated representative in the meeting. Listed below are the committees for the YCI facility:

- Craft Safety Committee.
- Site Management Safety Committee.
- Site Safety Professionals Committee.
- Executive Safety Steering Committee.

Refer to YCI Construction Contractor Safety Committee Program YCI-M1-YCI-00-0000-HS-PLN-0003.

13. EMERGENCY RESPONSE

Contractors shall establish emergency response procedures and organizations to address: occupational injury or illness, fires, and rescue. As an alternative to a contractor-based response organization, contractors may use/render a third-party organization for emergency response issues beyond their scope of training such as high angle or confined space emergencies.

Contractors shall establish procedures for evacuation of personnel and it shall address assembly and accounting for personnel, and communication to YCI.

Employees who may reasonably be expected to be exposed to blood or other body fluids must comply with regulatory requirements of blood borne pathogens. First aid kits must contain "Universal Precautions" items, including chemical splash goggles, medical gloves, cardiopulmonary resuscitation (CPR) masks (with one-way valve), antiseptic hand cleaner, drying cloths, and red bags labeled "BIOHAZARD." Medical waste generated as a result of first aid response must be placed in labeled red bags, and disposed of in accordance with state and local requirements.

14. EMERGENCY ACTION PLAN

Each contractor must develop an Emergency Action Plan. The plan will be revised as necessary as construction operations progress and must be posted on the contractor's notification boards and communicated to workers during the EHS orientations, periodically throughout the year and when any changes are made. The Emergency Action Plan must adhere to Construction Phase Emergency Action Plan YCI-M1-YCI-00-0000-HS-PLN-0005.

15. SEVERE WEATHER

The Emergency Action Plan Manager will announce severe weather alerts (such as tornados) by public address system **or other means of immediate notification available at the worksite**. Employees will immediately retreat to the (**Designated Area**) until the threat of severe weather has passed as

communicated by the Emergency Action Plan Manager. Hurricane Preparedness actions will be implemented if a storm is in the Gulf of Mexico.

The facility will use several indicators in determining the precautions to be taken during inclement weather conditions. Weather Bug® is the primary weather indicator utilized at the LA YCI Site. The Site uses NOAA, and weather alert services from local weather stations as a secondary means of notification. The degree of action to be taken will be based on the distance, speed, severity, and direction of the weather disturbance.

The YCI Site HSE Manager is the Project Weather Emergency Coordinator and will notify YCI Site personnel when conditions are announced.

Alert Condition: Notification when lightning has been detected within 15 miles of the facility. The Purpose of the alert condition is to monitor the situation and notify all construction Site Personnel that action may be necessary and to be ready to react if weather conditions worsen.

Shelter Condition: Six Mile notifications are communicated when lightning strikes are detected within a six-mile radius of the plant. Employees working at the site must seek shelter until the all clear notification is given.

Ten Mile: Notifications are communicated to workers at a height of 50 feet or greater when lightning is detected within 10 miles. Workers will begin to descend the structure below the 50-foot level.

All Clear: Notification is given after 20 minutes has passed with no additional lightning strikes being detected within a six-mile radius of the plant. The YCI Project Weather Emergency Coordinator will communicate that the All Clear has been given and work may resume.

Refer to the YCI Methanol One, LLS, Construction Phase Emergency Action Plan YCIM1-YCI-00-0000-HS-PLN-0005.

16. TORNADO WARNING

When the St. James Emergency Preparedness Department sounds the parish alarm system, this indicates either a chemical release or an inclement weather condition (tornadic activity) is occurring and the site is possibly in harm's way. An announcement will follow indicating the situation. In the event of a weather condition, a shelter in place notification will be given. Everyone will stay sheltered in place until the St. James Emergency Preparedness Department has issued the All Clear notification. The Parish conducts Monthly alarm tests on the first Thursday of the month at 12:00 noon.

Refer to the YCI Methanol One, LLS, Construction Phase Emergency Action Plan YCIM1-YCI-00-0000-HS-PLN-0005.

17. HOMELAND SECURITY

Should a Severe Condition "Red" threat advisory be issued indicating a terrorist attack occurrence or the severe risk of possible terrorist attacks, YCI Methanol One, LLC. Project Management will determine whether the project should evacuate all workers or shelter in assembly areas. Project Management will communicate to workers and contractors all known information of the threat and of the crisis plan.

18. AGENCY INTERFACE

Contractors are required to establish procedures for agency or third-party inspections. Agency inspection procedures shall:

- Include a process for immediately notifying YCI.
- Include a process for making jobsite available for inspectors.
- Define who will accompany an inspector.
- Document what happened and what was observed during the inspection.
- Include a process for addressing deficiencies and tracking through completion.

Refer to Regulatory Inspection Procedure YCI-M1-YCI-00-0000-HS-PRO-0022.

19. EVALUATION OF PROGRAM EFFECTIVENESS AND AUDITING

Contractors shall evaluate the safety and health program to ensure that it is effective and appropriate to workplace conditions as often as necessary to ensure continued program effectiveness. As a minimum, the site-specific plan shall include routine audits of the entire worksite. Formal audits, with reports, shall be conducted at least once per week. Records of audit reports and findings, and corrective actions must be submitted weekly. Records of action items must be tracked and submitted to YCI and kept on file.

Contractors must revise the program if necessary and correct identified deficiencies in a timely manner.

20. MULTI-EMPLOYER WORKPLACE RESPONSIBILITIES

YCI responsibilities include:

- Providing information about hazards, controls, safety and health rules, and emergency procedures to all contractors/employers at the workplace.
- Ensuring that safety and health responsibilities are assigned, as appropriate, to other employers at the workplace.

The responsibilities of a contract employer include:

- Ensuring that the host employer is aware of the hazards associated with the contract employer's work and what the contract employer is doing to address them.
- Managing the safety performance of sub-contractors.
- Advising the host employer of previously-unidentified hazards that the contract employer identifies at the workplace.

21. INCIDENT INVESTIGATION AND NOTIFICATION

YCI employees and Contractors must investigate all incidents to identify root cause and contributing factors. Any incident which is a significant near miss, doctor's first aid or greater, property damage or equipment damage must be verbally communicated immediately to YCI EHS Department and to the YCI operations management, as well as:

- Initial notification of the incident with brief details, when gathered.

- Documented notification within one (1) hour of the incident with brief details.
- Initial Report submitted 8 hours from the time of the incident.
- More time may be granted by the YCI EHS Manager for final report depending on circumstances.

Refer to HSSE Incident Investigation Procedure – Construction, YCI-M1-YCI-00-0000-HS-PRO-0019.

22. EMPLOYEE BULLETIN BOARD

The project team will install and maintain a notification board at the location where most employees report to work. Workers must be advised of the location of the nearest notification board. Employees must be responsible for reviewing the bulletin board to keep informed of safety-related information. Employee bulletin boards must be sufficient size to display and post EHS bulletins, newsletters, posters, accident statistics, and other EHS educational material.

At a minimum, the EHS bulletin board must display:

- OSHA Safety and Health Poster (Your Rights as a Worker).
- OSHA Safety and Health Complaint Form.
- Requirements, provisions and number of the Employee Concern Program Hotline (Whistle-blower Protection).
- Citations and notices as appropriate.
- OSHA 300A form (when required).
- YCI Methanol One, LLC. furnished EHS bulletins and publications.
- Any applicable permits.

Additional items to be posted include:

- Typical Safety & Health posters (home safety and at work safety).
- Minutes of EHS meetings.
- Information on incidents and Lessons Learned.
- Hazard communication information.
- Results of the EHS Observation program.
- EHS Committee minutes.

23. TRAINING

24. REFERENCES

- Construction Contractor Safety Committee Program YCI-M1-YCI-00-0000-HS-PLN-0003
- Construction Phase Emergency Action Plan YCI-M1-YCI-00-0000-HS-PLN-0005

- Contractor HSSE Management YCIM1-YCI-00-0000-HS-GUI-0002
- Drug and Alcohol Abuse Prevention Program and Policy YCIM1-YCI-00-0000-HS-POL-0003
- Fall Prevention and Protection YCIM1-YCI-00-0000-HS-PRO-0035
- Fire Prevention and Protection Procedure – Construction Phase YCIM1-YCI-00-0000-HS-PRO-0028
- Hazard Communication Procedure – Construction Phase YCIM1-YCI-00-0000-HS-PRO-0032
- HSSE Incident Reporting Procedure – Construction YCIM1-YCI-00-0000-HS-PRO-0019
- Personal Protective Equipment – Construction Phase Procedure YCIM1-YCI-00-0000-HS-31
- Regulatory Inspection Procedure YCIM1-YCI-00-0000-HS-PRO-0022
- Signs, Signals and Barricades Procedure YCM1-YCI-00-0000-HS-PRO-0029

APPENDIX A – CONTRACTOR MONTHLY REPORT



Contractor Monthly Report

Company Name: _____

Month Reported: _____

	Description	Monthly	Year to Date Statistics	Project Total
Sec. 1	Company Manhours (direct, indirect and subs)			
Sec. 2	# of Behavioral Observations			
	% of goal attainment			
	# of Supervisor Audits			
	% of goal attainment			
	# of Safety Inspections			
	# of open action items			
	# of Pre-task Assessments			
Sec. 3	Near Miss Reports			
	Job site First Aid Cases			
	Doctors First Aid Cases			
	Equipment Damages			
	Property Damages			
	Recordable Incidents			
	DART Incidents			

Section 4 Details Section

Date	Near Miss Description

Date	Job Site First Aids/ Doctor's Cases

Date	Equipment/Property Damage Description

Date	Recordable / DART Incidents

APPENDIX B – SAFETY AND HEALTH PROTECTION PROGRAMS

B1. General Rules

These rules shall be followed by YCI and contractor employees:

- No one is allowed to ride on the top outside edge of the bed of a pickup truck.
- Cellular telephones shall not be used in construction areas. This requirement may be lifted and cell phone usage may be managed by construction site management, but in no case, shall workers be allowed to use cell phones for personal use in construction areas.
- Cell phones shall not be used while driving a vehicle on YCI property or while driving a YCI vehicle, except in emergency conditions as specified by construction site management.
- Eyewash stations must not be used for washing hands.
- Smoking is allowed only in designated areas. Each designated smoking area shall be at least 15 feet from electrical classified areas and 50 feet from flammables, and shall include a cigarette butt container, a trash can, and a fire extinguisher.
- When compressed air is used for cleaning purposes, such as equipment or lines, proper PPE must be worn and pressure regulated to less than 30 psi.
- Compressed air must not be used for body-cleaning of personnel.
- Workers must not stand on surfaces of equipment or piping to perform work.
- Trash and scrap disposal shall only be in containers that are designated for this purpose. Disposal of greasy or oily rags shall only be in closed metal containers that are designated for this purpose.
- Workers shall discuss lifting of materials or objects that weigh more than 35 pounds with supervision so that appropriate procedures or tools can be utilized and included in their JSA.
- Long hair must be tied back and tucked inside hard hats. No loose clothing, dangling sleeves or neckties shall be worn while working on or near equipment with moving parts.
- Employees are not allowed to wear rings, watch chains, dangling necklaces or neck chains, or dangling earrings while working on YCI property.
- Ergonomic guidelines and procedures must be included in the site-specific plan.
- All deliveries must be unbound by the delivery driver. A ladder will be used to access all truck beds. The driver must exit the cab of the delivery truck/van and vehicle turned off while it is being unloaded. The operator cannot move the vehicle until all employees have been cleared of the area.

B2. Employee Participation

These YCI rules shall be followed by contractor employees:

- Remove defective or unsafe equipment from service and report this equipment to supervision so that it may be repaired or replaced.
- Report unsafe conditions to supervision. Correct these conditions if appropriate or use measures, such as barricades or tagging, to protect area personnel.
- Report suggestions for improving safety to your supervisor.

B3. Work Environment

The contractor site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926.25 Housekeeping
- 29 CFR 1926.29 Acceptable certifications
- 29 CFR 1926.34 Means of egress
- 29 CFR 1926.35 Employee emergency action plans
- 29 CFR 1926.51 Sanitation
- 29 CFR 1926.56 Illumination
- 29 CFR 1926.57 Ventilation
- 29 CFR 1926 Subpart G - Signs, Signals, and Barricades
- 29 CFR 1926 Subpart H - Materials Handling, Storage, Use, and Disposal
- 29 CFR 1926 Subpart X - Stairways and Ladders
- 29 CFR 1926.52, Occupational Noise Exposure

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- The contractor shall provide adequate eyewash/shower stations throughout the assigned portion of the construction area until the site's stations are operational. Positioning and specifications of the contractor's stations shall be based on ANSI Z358.1.
- Contractors shall establish practices and procedures for the use of temporary barricades, including in these types of situations: transient operations with high-risk hazards such as lifting; overhead work, hydro-test areas, X-ray test areas, hydro-blast areas, and areas where chemical hazards exist. Procedures shall clearly define entry of authorized and unauthorized personnel.
- Contractors shall not utilize silica-based abrasive blasting without YCI approval.
- Contractors shall not perform lead abatement until a contractor program has been established, and then approved by YCI.
- Contractors shall establish traffic control procedures.
- Contractors shall not perform work over or near water until a contractor program has been established, and then approved by YCI.
- Hoses and extension cords that are extended across a walkway or stairway shall be hung above head level.
- Stairways and walkways shall be kept clear and the use of three points of contact maintained.
- Out of place tools and materials shall be properly stored or disposed of.
- YCI shall be contacted if hazardous waste materials are discovered or generated.
- Scaffold, equipment, etc., must not block mounted fire equipment and active shower/eyewash stations.

- All nails/screws shall be removed from scrap lumber immediately and loose nails picked up and properly disposed of.
- Contractors must control employee exposures when noise levels exceed 85 dBA as an 8-hr TWA, or if impact/impulse noise exceeds 140 dBA. Maximum allowable noise exposure must not exceed the permissible noise exposures.
- Lunch facilities must be kept in a clean and orderly fashion. All garbage containers must have lids and cleaned out daily. Lunch tables and microwaves must be kept clean and wiped down with a disinfectant solution to reduce germs.
- Adequate chemical toilets must be provided on the jobsite and kept serviced to prevent unsanitary conditions or nuisance. They must be in good repair so they do not leak contents to the surrounding area. No toilets may be placed in elevated structures.
- All stacks shall be stable and self-supporting. Observe height limitations when stacking materials.
- Pipes and bars shall not be stored in racks that face main aisles to avoid creating a hazard to passersby when removing supplies.
- When storing material/equipment on "dunnage" or stack boards, stack two-inch by four-inch (2x4) boards horizontally. Boards cannot be stacked any higher than the base width of the board. Example: a 2x4 inch board can only be stacked two boards high. This will prevent materials from shifting.

B4. Loading/Unloading/Storage of Materials and Equipment

Any time equipment is being unloaded from a supplier, vendor or shipment from a contractor's internal company, the following rules will be followed on YCI Methanol One, LLC. Projects:

- The Vehicle must be turned off.
- The Parking break/airbrake must be set.
- The driver must exit the cab of the vehicle.
- The driver is required to unsecure or secure the load, no other workers are allowed to assist the driver in the task.
- The driver must stay out of the vehicle while the load is being unloaded or loaded.
- Once the loading or unloading is completed, the crew are to clear the area and the driver may re-enter the cab and move the vehicle.
- Material or equipment stored must be properly secured to prevent tipping.
- Shelving systems should have load capacity clearly marked and heavier items stored on lower levels.
- Any stand/racks which are used to support materials such as pipe or rebar must have load the capacity and certification papers. Job made work stands are not allowed on YCI property.

B5. Demolition work

Prior to any demolition work starting on site, the contractor must complete a JHA to ensure all hazards associated with the work have been identified and mitigated. Depending on the scope of work, YCI may require a more detailed Demolition Plan.

B6. Hazard Communication

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926.59 Hazard communication

Additionally, these rules shall be used as a basis for the contractor safety plan:

- Contractors are responsible for maintaining an up-to-date chemical inventory and copies of SDSs (only of those chemicals brought on site). These must be submitted to YCI Methanol One, LLC EHS Department so that they can be reviewed and approved before the chemicals can be brought to the facility.
- All containers must have proper labeling accordance with the HAZCOM Standard.
- Procedures for chemical cleaning of equipment must be approved by YCI prior to work.
- The contractor must make every attempt to substitute less hazardous substances for any carcinogenic material.
- Some chemicals are extremely hazardous and will not be allowed on site without proper approvals. The use of these chemicals may necessitate additional control mechanisms such as establishing dedicated use areas, specific postings/warning signs, notification to adjacent workers, ventilation controls, decontamination procedures, personal hygiene stations, etc.
- All chemicals must be stored in accordance with the manufactures guidelines.

Refer to the Hazard Communication Procedure – Construction Phase YCI-M1-YCI-00-0000-HS-PRO-0032.

B7. Personal Protective Equipment

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart E - Personal Protective and Life Saving Equipment

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- Contractors shall perform a PPE hazard assessment and provide YCI with a copy of the results. PPE practices shall be coordinated with YCI procedures.
- Any employees working on the M1 project must wear gloves at all times while in the work area.
- Proper protective gloves shall be worn to protect employees from hazards associated with specific job task.
- At a minimum, all Contractor personnel and visitors must wear sturdy work boots, long pants fitting properly (baggie, tight or sweat pants must not be worn) and shirts with 4-inch sleeves as prescribed by their health and safety plan. Personnel working on construction activities or in the

field must also wear impact resistant boots, hard hats, safety glasses with rigid side-shields and a high visibility vest.

- Altering the use of PPE will result in disciplinary action.

Refer to the Personal Protective Equipment – Construction Phase procedure YCI-M1-YCI-00-0000-HS-31.

B8. Industrial Hygiene

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926.52 Occupational noise exposure.
- 29 CFR 1926.53 Ionizing radiation.
- 29 CFR 1926.54 Nonionizing radiation.
- 29 CFR 1926.55 Gases, vapors, fumes, dusts, and mists.
- 29 CFR 1926.1126 Chromium.

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- The contractor shall inform YCI of the results of personal monitoring in a manner consistent with 1926.33.
- The contractor is responsible for anticipating, recognizing, evaluating, and controlling employee exposures to chemical, physical, and biological agents encountered during construction activities.
- The Contractor Industrial Hygiene (IH) program must address the methods used for evaluation and methods used to prevent exposure. If the contractor has historical data from monitoring, YCI will review the data and determine if additional monitoring is needed. Exposure assessments may be performed using various methodologies (integrated sampling, direct-reading instruments, modeling, etc) as needed.
- YCI requires that controls are implemented to eliminate or reduce employee exposures to below recognized occupational exposure limits (PELs & TLVs). Employers should strive to maintain exposures to As Low as Reasonably Achievable (ALARA).
- Control measures to eliminate or reduce industrial hygiene-related exposures must be identified during the pre- job planning process, and delineated in the JHA.
- Dust control must be addressed as part of the JHA and mitigation techniques applied. Fugitive dust emissions resulting from grading must be done in low wind days and when less employees are on site to reduce employee exposure.
- The implementation of control measures must follow the following hierarchy:
 - Substitute to a less hazardous material, if possible.
 - Use engineering controls.
 - Use administrative controls.
 - Use PPE.

B9. ENVIRONMENTAL IMPACT MITIGATION

All contractors working at the YCI facility must ensure their work activities do not affect natural resources, storm water, wetlands, streams, air quality, vegetation and wildlife. In efforts to ensure limited impacts, contractors must:

- Prepare a detailed plan for flushing pipelines, new water lines, sewer lines and fire water lines so the activities do not over flow drainages and create additional runoff.
- Coordinate high pressure blows to ensure limited exposure to the community.
- Require waste water discharge into sewer or septic systems.
- Obtain permission from YCI for any hazardous waste discharges that must meet local, state and federal requirements.
- Obtain approval from YCI for all pesticide and herbicide applications which must be used as recommended by the manufacturer.
- Comply with the YCI Stormwater Pollution Prevention Plan.
- Conduct weekly inspections on site, address items immediately, and file reports in the YCI Methanol One, LLC EHS department.

B10. HEAT STRESS

Contractors must provide for appropriate mitigating measures prior to heat stress becoming an issue. The American Conference of Industrial Hygienists (ACGIH) threshold limit value (TLV) guidelines must be followed for developing and implementing heat stress mitigation strategies.

- The use of heat stress controls must be addressed during the planning stages for all work that is to be performed in elevated temperature environments, and whenever impermeable clothing or multiple layers of clothing must be worn to conduct work.
- Drinking water will be dispensed in containers with a tight sealing lid and labeled as "Drinking Water." Drinking water containers are to be cleaned daily and have tape around the lid with the date of service and contents on the tape.
- A trash receptacle must be located next to the container. The attendants who clean and fill water coolers must be trained on proper hygiene practices before being able to perform this task.
- A record of this training must be kept on file in the contractor's offices and readily available for review by YCI Methanol One, LLC.
- Adequate cups will be made available at each drinking water container. Cups will be stored in a durable, clean dispenser. A trash can or other type receptacle will be provided to collect used cups.
- Contractors are responsible for cleaning up around the water container area. Use of common utensils (e.g., sharing the same cup) is prohibited.

B11. TOOL SAFETY

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart I - Tools - Hand and Power.

- ANSI 14.1 Portable wood ladders.
- ANSI 14.3 Portable fiberglass ladders.
- ANSI 14.3 Portable job-made ladders.

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- The contractor shall include a formal inspection procedure for all tools. That procedure must include a means of indicating that formal inspection is current (such as colored tape/tag system). The contractor is also required to have an inspection-before-use procedure for all users of tools.
- Portable metal ladders are not permitted for use at the worksite.
- Portable ladders must be set up and used in accordance with OSHA and manufacturer requirements and be a minimum Type I, Heavy Duty Classification. Light and medium duty class ladders are prohibited.
- All ladders must be tied off or secured by a co-worker during use and the user must have three points of contact.
- Utility air hoses must be secured with locking pins or whip checks.
- Factory-installed machine guarding must not be removed or modified without manufacturer's approval.
- Damaged or defective tools shall not be used.
- Tools and hoses shall be stored when not intended for use.
- Job made hand tools are not allowed on YCI property.

B12. WELDING AND CUTTING

Prior to the start of any hot work activity, the Contractor must perform a walk-down of the work to facilitate thorough hazard identification and control. The Contractor is ultimately responsible for compliance with these requirements.

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart J - Welding and Cutting

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- The contractor shall include procedures and programs that are used to manage the hazards of hot work.
- Cylinders must be ready for use (in a cart with regulators and hoses installed) or the cylinders must be separated by 20 feet.
- Cylinders on carts that are ready for use must be secured with substantial metallic material, such as chain or a ring. Rope or light-weight bailing wire is not allowed.
- Cylinders in storage must be secured with substantial metallic material, such as chain or heavy wire. Rope or light-weight bailing wire is not allowed.
- Flame arrestors must be installed at both regulators of cylinders that are ready for use.

- Contract personnel who perform fire watch duties must be qualified and proof of training documented and must be proficient in the use of fire extinguishers.
- The fire watch must observe the hot work area for 30 minutes (60 minutes for roof work) after the completion of hot work if combustible or flammable hazards are in the area. For overhead work, a fire watch may be necessary on multiple levels. The fire watch may not be assigned any other duties during hot work operations. The fire watch must stop work if sparks travel beyond the area that fire watch can observe.
- Alternatives to performing hot work should be used where practical or in fab shops to reduce field exposure.
- When placing a machine in the work area, exhaust must be directed where vapors cannot enter confined spaces or work areas.
- Full spark containment is required when overhead welding is being done in or around the following areas: hazardous classification, high traffic, where flammables or combustibles are located.
- Contractors must ensure adequate storage of valves and regulators with the protection caps applied during storage of compressed gas cylinders.
- Flame arrestors will be located at the torch and at the regulator.
- Prior to the start of any hot work activity, the Contractor must perform a walk-down of the work to facilitate thorough hazard identification and control. The Contractor is ultimately responsible for compliance with the requirements of the permit.
- All opening must be covered to ensure sparks do not fall to surrounding work areas.
- If any work is conducted in heavy vegetated areas, adequate protection must be in place to ensure no fires start.

B13. ISOLATION OF HAZARDOUS ENERGY

Contractors must establish a procedure for employees who have the potential exposure to any unexpected release of hazardous energy. No employee will be allowed to perform work without adequate training. The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1910.147.
- 1926 CFR Subpart K.
- NFPA 70E.

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- The contractor shall include the procedures and programs that are used to control sources of hazardous energy, including: kinetic (mechanical), pressure, potential (gravity), electrical, radiation, temperature, and chemical.
- Workers locking out to do work must have their own personal lock and key, with the appropriate color coding.
- Workers must apply and remove their own locks. All keys associated with a lock must be in the control of the individual assigned that lock.
- Workers must remove their individual locks at the end of the shift or prior to leaving the worksite.

- A tag must be attached to the lock with the worker name, company name, contact number and reason for lockout or identifications must be posted on locks with the date.
- Procedures should have all P&IDs and any reference material from the manufacture included for the work being performed.
- Work on energized electrical systems is prohibited. If work must be conducted on energized systems, a request must be submitted in writing detailing why the request is needed with a detailed hazard assessment. Work authorization must be given by the YCI EHS Manager in writing when it has been determined that there is no reasonable alternative course of action and adequate safe guards are implemented. Exception to this is taking voltage, current measurements and verification of zero energy using standard test equipment.
- In the event a locking device cannot be utilized, a locking device and tag system is the control measure for a system that a contractor must implement as additional measures to provide the equivalent level of safety which must be approved by YCI EHS Manager. The process will be walked down by two levels up in the management organization and signed off ensuring all safe guards are in place before start of the work.

B14. CONFINED SPACE ENTRY

If contractor employees are expected to enter confined spaces, the site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926.21(b).

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- Each contractor must have a designated confined space person and records of qualifications must be kept on site.
- If contractor employees are expected to enter confined spaces, the contractor shall include procedures and programs that are used to manage the hazards of confined spaces.
- If approved by YCI, the contractor may use procedures that downgrade a space to non-permit required.
- There must be a method for documenting the results of hazard analysis.
- Ventilation plans must be created before anyone can enter a permit required confine space.
- Workers entering a permit required confined space must wear a personal monitor for hazards associated with the space.
- If LEL results are greater than zero, no entry will be allowed and investigation must be conducted to determine the source.
- Rescue plans must be approved by YCI before work is permitted.
- All confined spaces will be marked with the adequate postings for the space such as "Permit Required Confined space" or "non-permit required confined space."
- It is the contractor's responsibility to label each space as they create it during the construction phase.

B15. LINE/EQUIPMENT OPENING

If contractor employees are expected to open vessels or process lines, the site-specific plan shall be based on these regulatory standards:

- 29 CFR 1910.119(f)(4).

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- If contractor employees are expected to open vessels or process lines, the contractor shall include procedures and programs that are used to manage the hazards of line opening.

B16. FIRE PROTECTION AND PREVENTION

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart F - Fire Protection and Prevention.

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- All contractors must develop and implement a fire protection program.
- Prior to hot work, there must be a method for conducting a hazard analysis and documenting the results.
- Scaffold, equipment, etc. must not block mounted fire equipment and active shower/eyewash stations.
- All fuel storage tanks or portable truck mounted fuel tanks must have the locking device removed from the fuel spouts. All spouts must be manned any time equipment is being fueled.
- Flammable and combustible liquids must be stored in approved containers and cabinets, such as those that are UL or FM listed, and quantities must be limited to minimize fuel loading in accordance with NFPA Codes. These cabinets must be grounded and all manufacture's recommendations followed.

Refer to the Fire Prevention and Protection Procedure – Construction Phase YCI-M1-YCI-00-0000-HS-PRO-0028.

B17. ELECTRICAL SAFETY

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart K – Electrical.
- 29 CFR 1926 Subpart V - Power Transmission and Distribution.

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- The contractor is required to adhere to safe work practices, as specified in NFPA 70E. The contractor is required to provide a list to YCI (at the beginning of the job) of qualified persons. That list must be maintained and updates must be provided to YCI.
- A functional GFCI must be installed on each welding machine outlet, generators and similar type portable electrical producing equipment and for any temporary power use.

- A GFCI must be used when using portable, electric hand tools and equipment with cord/plug connectors.
- GFCI must be used in damp or wet work areas.
- Extension cords with taped repairs are not allowed.
- Repairs must be made by a qualified person.
- A hazard review must be conducted and documented with the JHA process with mitigation techniques listed on all task performed.
- All inspections for PPE associated with energized work must be documented and records kept on file with the YCI EHS department.
- Any altered PPE must be removed from service.
- Anyone caught altering PPE will be subject to disciplinary action.
- Only qualified workers can work on electrical equipment.
- Any tools or equipment which do not pass inspection must be taken out of service and marked "do not use" with an explanation written on the tag and dated.
- All cords and leads must be hung overhead. If cords and leads cannot be hung overhead, they must be run in an orderly way to prevent tripping hazards.

B18. SCAFFOLDING

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart L – Scaffolds.

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- All users and builders for scaffolding must have all required training before using, modifying or building scaffolds.
- YCI requires that persons signing off on inspections must be a qualified competent person and have an adequate tagging system.
- All scaffolds must have some means of identifying daily inspection results.
- Users must inspect scaffolds and follow safety precautions indicated on scaffold tags prior to use.
- If a scaffold has more than one means of access, all access points must be inspected for the scaffold to be utilized.
- Scaffolding should be constructed to ensure material does not fall onto workers in lower levels. Openings in the decks should be made to a minimum for penetrations through the deck. Toe-boards, screening and or netting shall be used to prevent falling objects.
- All scaffold decking shall be maintained throughout each the job to prevent tripping hazards and cleaned after the job is completed.

B19. FALL PROTECTION

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart M - Fall Protection.
- ANSI Z359.1 Requirements for Personal Fall Arrest Systems, Subsystems and Components.
- ANSI A10.32 Standard for Personal Fall Protection used in Construction and Demolition Operations.

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- YCI requires all contractors to use the hierarchy of control to mitigate fall hazards by either hazard elimination, passive fall protection, fall restraint or administrative fall protection systems.
- YCI requires that protection be required 100% of the time for falls of 6 feet or greater.
- YCI requires that credentials for competent persons be provided.
- YCI requires that suspension trauma be addressed in the selection of fall arrest equipment and in rescue procedures.
- YCI requires that all contractors conduct a Fall Hazard Analysis.
- Anchor points must be designed for the scope of the work.
- The practice of tying a lanyard back to itself is permitted only when the lanyard is specifically designed for such use.
- When dependent on fall arrest systems, retractable lanyards must be used when working at unprotected elevated platforms or scaffolds where lanyards with shock absorbers would not provide adequate protection because of the short fall distance.
- Harnesses must be inspected before each use and properly stored. Harness should not be laid down on the ground or hung from valves or process equipment while not in use.
- All harnesses on site must be issued by the contractor and must be entered in the contractor's inspection program.
- All phases of work must be evaluated to ensure proper safeguards are implemented to eliminate falling objects. When an exposure exists due to the high frequency of a task, such as steel bolt up or scaffold erecting, additional safety measures must be implemented.
- Guardrails, grating or hole covers are not to be removed without proper authorization.
- 100% tie off is required at 6 feet or greater.
- Training is required for users of fall protection in the proper use and inspection process.
- Monthly inspections are required by a competent person and documented.

Refer to the Fall Prevention and Protection Procedure, YCI-M1-YCI-00-0000-HS-PRO-0035.

B20. CRANE SAFETY

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart CC – Cranes and Derricks in construction.

- ASME B.30.

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- YCI requires that routine inspection records, lift plans, and operator certificates be readily available for inspection. All cranes must be current on their annual certifications before delivery to the facility.
- Contactors must have a detailed inspection program which covers at a minimum, pre-use inspections. These inspections must be conducted prior to each shift, or if work stops due to inclement weather or an incident happens with that crane.
- YCI requires that credentials for competent persons be provided. Certification must be from NCCCO, NCCER, CIC or OECP. YCI may review other certification programs and approve, if required.
- Crane operators must complete a medical certification examination at least every three years in accordance with ASME B.30.5. A valid medical card must be provided to document this requirement.
- Approved lifting plans must be established for critical lifts.
- Suspended loads must be attended at all times.
- Rigging equipment must be inspected before each use and stored/maintained in accordance with the manufacturer's recommendations. Any rigging not properly stored must be removed from service.
- There should be no more than one eye in a hook at one time. Shackles should be used if more than one eye should be placed inside a hook to prevent roll back.
- When a contractor performs a reconfiguration of a crane, it must be re-inspected by a competent person to ensure all components have been properly installed. An example of this is a jib installation or block change out.
- The operator must ensure wind gusts do not impact the lift being made. All lifts will be made in conjunction with manufacture suggestions for that equipment, but the operator may shut down the lifts, if he deems the lift unsafe.
- The use of a man basket to hoist workers onto a platform is prohibited, except when the use of a conventional means of reaching the work area, such as a ladder, scaffold, or man lift, would be more hazardous or is not possible because of structural design or worksite conditions. Personnel lifts must be properly planned and executed. YCI Methanol One, LLC. must authorize this type of activity in advance of the lift.
- Any lifts made with multiple pieces per lift such as "Christmas treeing" during steel erecting must be approved by YCI.

Critical lifts are defined as:

- Requiring two lifting devices.
- Lifting more than 75% of the crane's lift capacity.
- Lifting critical equipment.

- Lifts involving non-routine or difficult rigging arrangements or where loads will require exceptional care in handling because of size, weight, close-tolerance installation or high susceptibility to damage.
- If the item being lifted were to be damaged or upset, it could result in a release of hazardous material into the environment or the release of airborne concentrations that could exceed established occupational exposure limits.
- The item being lifted is unique and, if damaged, would be irreplaceable or not repairable and is vital to a system, or project operation.
- The cost to replace or repair the item being lifted, or the delay in operations of having the item damaged, would have a negative impact on the construction project to the extent that it would affect project commitments.
- The item, although non-critical, is to be lifted above or near a critical item or component.
- Before any critical lift can be executed, a pre-lift meeting must be held with all contractors who are involved or effected by the lift.

B21. MOBILE EQUIPMENT

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart O - Motor Vehicles, Mechanized Equipment, and Marine Operations.
- 29 CFR 1926 Subpart W - Rollover Protective Structures; Overhead Protection.
- 29 CFR 1910.178 Powered industrial trucks.
- 29 CFR 1926.453 Aerial Lifts.

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- YCI requires that operators of powered industrial trucks, cranes, excavator's aerial lifts or any other motorized equipment hold current qualification/certification on their person whenever operating such equipment.
- Pre-use inspections must be completed and deficient items must be noted and submitted for repairs. No equipment shall be used if a safety related device is not properly functioning.
- All dozers, loaders, tractors, end loader backhoes, and other equipment with an obstructed rear view must have functioning backup alarms.
- Helpers must remain in sight of or in communication with the equipment operator.
- All personnel in aerial lifts must maintain 100% tie-off and never stand on handrails for any reason.

B22. EXCAVATION SAFETY

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart P – Excavations.

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- The contractor must ensure a competent person on site during all phases of the excavation work and all workers who work in the excavation must have general excavation training.
- YCI considers any cut of any depth and any earthen penetration to be an excavation. Analysis of underground hazards must be performed prior to excavation and must be coordinated with and approved by YCI. YCI requires that credentials for competent persons be provided.
- Location services are required and Excavation Plans must be submitted and compared to "as-built" drawings, P&IDs or other engineering documents to ensure proper clearance of all utilities.
- If work is being conducted near the city servitude, a Louisiana One Call (LOC) must be made 48 hours prior to beginning the work.
- If there is any uncertainty as to the degree of safety protection anticipated on underground electrical power lines, the electrical service should be de-energized first with a planned outage arranged and coordinated through YCI Methanol One, LLC.
- An assigned representative must work directly with the Contractor who will hand dig or otherwise safely "pot hole" (daylight) to verify location and depth of the various utilities and underground project and/or lines which may conflict with the excavation activity.
- Anytime excavations occur within four (4) feet of utility services, the representative should be on site to ensure proper locations.
- If an excavation meets the requirements of a confined space, the YCI confined space program must also be followed.
- Adequate barricading and fall prevention methods must be followed on excavations deeper than 30 inches.
- Any excavations over 20 feet deep must be designed by a registered professional engineer.
- Spoil piles are not allowed in the immediate construction area, the excavated dirt must be moved out of the work area to ensure adequate walkways and not reduce the size of the safe work area.

B23. CONCRETE CONSTRUCTION/REBAR MATTING

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart Q - Concrete and Masonry

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- The contractor is required to provide a copy of the procedures that are used to assess hazards of concrete.
- All vertical and horizontal rebar, form stakes, metal and/or plastic conduit, and/or small pipe stub-ups will be protected with approved caps or other industry accepted alternatives to protect against impalement and injury. Workers that operate vibrators, pump nozzles, and concrete buckets will wear appropriate eye and foot protection. Long-sleeved shirts shall be worn to protect against exposure of concrete to the bare skin and the possibility of concrete burn and contact dermatitis.
- All rebar, anchor bolts or other types of implement hazards must be covered with implement caps to prevent injury.
- Any stand used to form rebar must be designed with the load capacity rating.

B24. STEEL ERECTION

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart R - Steel Erection

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

- If a plan as per 1926.750 is used, the contractor is required to provide a copy for review and approval by YCI.

B25. SIGNS, SIGNALS AND BARRICADES

The site-specific plan shall be based on these regulatory standards:

- 29 CFR 1926 Subpart G

Additionally, these YCI rules shall be used as a basis for the contractor safety plan:

Refer to Signs, Signals and Barricades Procedure YCM1-YCI-00-0000-HS-PRO-0029.

APPENDIX C – KEYS TO LIFE

YCI Keys to Life

 <p>WORKING AT HEIGHTS</p>	<p>Always complete a JSA prior to starting elevated work.</p> <p>Fall arrest systems shall consist of a full body harness, two shock-absorbing lanyards, self-locking snap hooks and an adequate anchorage point.</p> <p>Always use approved fall protection above 6ft.</p> <p>Ensure a rescue plan is in place.</p> <p>Never work at heights alone.</p>
 <p>HEAVY EQUIPMENT OPERATIONS</p>	<p>High Visibility vests must be worn by all personnel around heavy equipment operations</p> <p>Only properly trained and authorized individuals are allowed to operate heavy equipment.</p> <p>Always use a spotter/signalman for all relocation movements.</p> <p>No riders are allowed on heavy equipment.</p> <p>Never approach equipment without making verbal or visual contact with the operator and equipment has stopped moving and placed in park.</p>
 <p>LIFTING OPERATIONS</p>	<p>Utilize a pre-use inspection process to ensure lifting equipment is certified and in good condition.</p> <p>A competent person must oversee supervising the rigging and lifting operation.</p> <p>Operators must be trained and certified as competent to operate equipment.</p> <p>Lifting equipment includes: crane, forklift trucks, jacks, axle stands and all lifting accessories such as chains, ropes, slings, shackles, eyebolts, and harnesses.</p> <p>Never work under suspended loads.</p>
 <p>HOUSEKEEPING</p>	<p>Limit the amount of materials taken into the work area.</p> <p>Keep stairways, passageways, ladders, scaffold and gangways free of material, supplies and obstructions.</p> <p>Plan for the adequate disposal of scrap, waste and surplus materials.</p> <p>Keep the work area and all equipment tidy by gathering loose materials.</p> <p>Designate areas for waste materials and provide containers.</p>
 <p>MOTORIZED / ROTATING EQUIPMENT</p>	<p>Be trained to operate motorized equipment.</p> <p>Inspect all equipment before use.</p> <p>Keep hands away from rotating equipment and never try to stop rotating parts.</p> <p>Prior to servicing, all energy sources must be de-energized to prevent accidental release of stored energy Such as: pneumatic air, electrically driven, battery driven, water driven. ALWAYS De-energize and try the equipment before performing work on equipment.</p>

 <p>GROUND DISTURBANCE</p>	<p>Competent person must inspect daily. All underground hazards must be identified, located, and isolated, if determined by work scope. Ground movement must be controlled and collapse hazards prevented. Continuous monitoring for any change in ground movement and environment is required.</p>
 <p>SCAFFOLDING / TEMPORARY WORK PLATFORM</p>	<p>Scaffolds and temporary work platforms are erected and modified only under supervision of a competent person. All scaffolds and work platforms must be tagged by a competent person and require pre-shift inspections to indicate status and additional precautions required for use. Where there is a possibility of items becoming detached at height, provide protection to areas below.</p>
 <p>CONFINED SPACES</p>	<p>Entry into a confined space requires adequate training and pre-authorization. Only qualified personnel may work in confined spaces. Do not enter until ALL energy sources have been isolated and locked out and the isolation point verified, documented and a proper authorization permit obtained. Verify that there is an emergency response and rescue plan. Safety attendant is mandatory to monitor workers.</p>
 <p>HAZARDOUS ENERGY</p>	<p>Identify the hazards associated with the energy sources, assess the risk, and then establish control measures to eliminate or mitigate. Electrical hot work is not allowed without specific approval and completed permit. Ensure all energy sources are identified and de-energized prior to starting work, locks and tags are used to prevent unexpected startup. For devices with cords, the cord should be disconnected from power source and secured.</p>
 <p>VEHICLE OPERATIONS</p>	<p>Authorization provided to drive a vehicle is given. Conduct preventive maintenance and inspections. Plan your travel. Abide by local road regulations. Use seat belt at all times. No smoking in company vehicles. Cell phones or other mobile devices may not be used, hands free or not.</p>