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*AIRBORNE EXPRESS*

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March 12, 2004

Director
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

References:
1) Docket No. 70-143; SNM License 124
2) Letter from B.M. Moore to NRC, License Amendment Request for the Oxide Conversion Building and Effluent Processing Building at the BLEU Complex, dated October 23, 2003 (21G-03-0277)
3) NRC Licensing Review to Support License Amendment Request for the Oxide Conversion Building and Effluent Processing Building, conducted on February 10-11, 2004

**Subject: Commitment Letter to Address NRC Licensing Review Pertaining to Integrated Safety Analysis Summary for the OCB and EPB**

Dear Sir:

Nuclear Fuel Services, Inc. (NFS) hereby submits responses to questions raised during the licensing review that was conducted in Rockville, Maryland (Reference 3). These responses reflect discussions with your staff during the licensing review that was conducted in the referenced meeting.

As noted in the attached responses, safety basis documents supporting this licensing review for the Oxide Conversion Building (OCB) and Effluent Processing Building (EPB) will be updated. As such, this submittal contains commitments that will be incorporated in the Integrated Safety Analysis Summary for the OCB and EPB located at the BLEU Complex.

NMSS01

If you or your staff have any questions, require additional information, or wish to discuss this, please contact me, or Mr. Rik Droke, Licensing and Compliance Director at (423) 743-1741. Please reference our unique document identification number (21G-04-0039) in any correspondence concerning this letter.

Sincerely,

NUCLEAR FUEL SERVICES, INC.

B. Marie Moore

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Vice President
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JSK/lsn
Attachment

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## Attachment

## NRC Licensing Review Questions Pertaining to Integrated Safety Analysis Summary for the OCB and EPB

**NRC Question 1: In sequence 17.17.1.1 (page 246), corrosion is listed as the initiator with a frequency of -1. If the two IROFS (OCB-7 and OCB-8) have both failed, the likelihood index of a corrosion leak should be 0 or higher, without further justification. Please justify the index of -1 for corrosion as an initiator given the assumed sequence. The staff has the same concern for sequences:**

| | |
|---|---|
| **2.24.1.1** | **page 231** |
| **7.17.9.2** | **page 239** |
| **9.17.4.1** | **page 242** |
| **9.17.6.1** | **page 243** |
| **21.1.1.1.A** | **page 250** |
| **21.1.1.1.B** | **page 251** |
| **21.1.1.1.C** | **page 251** |
| **23.17.1.1** | **page 254** |
| **25.21.1.2** | **page 255** |
| **27.17.1.1** | **page 257** |
| **40.6.2.3.A** | **page 259** |
| **40.6.2.3.B** | **page 259** |
| **43.17.2.1** | **page 262** |
| **47.16.1.1** | **page 264** |
| **49.21.2.1** | **page 265** |

NFS Response: All of the listed sequences are postulated single event scenarios involving potential leaks or ruptures of piping or tanks. The primary defense against the unacceptable consequences of chemical leaks is the integrity of the piping and tanks. Two independent means to ensure that this integrity is maintained will be listed as IROFS in the scenario table in the next ISA Summary revision. The first is the correct installation of the piping and tanks: selection of materials, fabrication methods, and hydrotesting. The second is the maintenance program, which controls routine work on and around the pipelines and tanks to ensure the integrity of containment is maintained. These two controls are independent. Chemical piping is constructed of stainless steel in accordance with our P3 pipe code for welded fabrication and hydrotesting. Routine inspections (a management measure) will be performed at a frequency appropriate to the system and will be specifically listed in the ISA file for the IROFS.

NFS agrees that the initiating event indices for the listed sequences will be changed to 0.

**NRC Question 2: Why is the initiator (leak in V-38 bottoms line) in sequence 7.17.9.2 on page 239 assigned an index of -2 when other leak initiators are given an index of -1?**

NFS Response: To be consistent with question #1 response, the initiator (leak in V-38 bottoms line) in sequence 7.17.9.2 will be changed from an index of -2 to an index of 0.

**NRC Question 3: Why is the initiator (plugged vent line) in sequence 17.1.1.1 on page 243 assigned an index of -2 when other plugging initiators are given an index of -1?**

NFS Response: The initiator (plugged vent line) in sequence 17.1.1.1 will be changed from an index of -2 to an index of -1.

**NRC Question 4: Provide the passive engineered control IROFS identified for sequence 27.9.1.1 on page 256 and sequence 27.9.1.2 on page 257.**

NFS Response: The passive engineered control IROFS identified for sequence 27.9.1.1 and sequence 27.9.1.2 is EAL-15.

**NRC Question 5: The initiators for sequences 38.7.1.2 (inadvertent addition of enriched scrap material) (page 257), 43.1.3.1 (V-77 bottoms line isolated) (page 261), and 43.18.1.1 (failure to configure support systems prior to starting scrap dissolver operations) (page 263) appear to be human errors. Why are they assigned an index of -2?**

NFS Response: Each individual accident sequence was examined to determine the appropriate initiating event frequency index. In general, failures of administrative controls or operator actions were given initiating event frequency indexes of (-1). However, three scenarios have human errors as their origin but have initiating event frequency indexes of (-2). Below is the reasoning why the initiating event frequency index was chosen. It should be emphasized that even if an index of (-1) had been chosen simply to be consistent with other scenarios, the performance criteria would still be met. However, the analysis team was given some latitude within the analysis guidelines to determine conservative but realistic initiating event likelihood indexes for each scenario. The scenarios in question were:

- **Item 38.7.1.2 - Violent reaction due to inadvertent addition of drum of scrap material to the natural dissolver**

  The initiating event is an operator error. It should be noted however that the scrap material is stored in specially fabricated pails with a wide base on them, while the natural material is stored in 55 gallon drums. This scenario would require more than a mere mix up between two different drums. The great dissimilarity between the storage containers would make it obvious to the operator what was stored in them and make mistaking one for the other virtually impossible. However, based on technical discussions, the initiator will be changed from an index of (-2) to an index of (-1).

- **Item 43.1.3.1 - High liquid level in scrubber V-77 as the result of operator isolating the bottoms line from the scrubber during operation**

  Event sequence 43.1.3.1 describes an upset event which could result in plugging of the scrap recovery dissolver system vent lines. The evaluated causes of this upset are valve closure on the V-77 bottoms line and pump P-77 failing to operate. Either of these two failures could potentially result in scrubber water backflowing into the dissolver system vent lines, thus forcing chemical fumes to be released through Tank TK-76R overflow line. The initiators for these two failures are given an index of (-2) (valve closure on the V-77 bottoms line) and (-1) (pump P-77 failing to operate). Based on technical discussions, the valve closure initiator will be changed from an index of (-2) to an index of (-1).

  For valves that must remain open or closed as part of an IROFS function, FRA/NFS will place a warning tag and tamper-evident seal on the valve itself. The manually operated ball valves that are used for this purpose in the OCF have the ability to be locked or sealed in the open or closed position. A loop of plastic or metal wire is strung through the holes on the handle and body of the valve, and sealed in such a way that it must be cut off if the valve position is to be changed. These seals are accompanied by a warning tag. Operators are trained to only change the valve position of such a valve by approved procedure in the unusual case that the valve must be opened or closed (generally for isolation during repair).

- **Item 43.18.1.1 - Starting the scrap dissolver system without the scrap dissolver scrubber or acid POG scrubber in operation**

  This was considered a very remote possibility since operator training during qualification emphasizes the importance of scrubber operation in the operation of the scrap dissolver system, so startup without the scrap dissolver scrubber is not likely. Moreover, the acid POG scrubber is designed to operate all the time, even when the scrap dissolver is not in operation. That system has its own independent procedures and alarms and start up of the scrap dissolver would not even be authorized if the POG scrubber were out of service. For this reason, the likelihood of such an initiating event is much lower than simply violating a single administrative rule. In this case, the definition for an index of (-2) ("Not expected, but might occur during plant lifetime.") is appropriate.

**NRC Question 6: Explain the following event sequences in detail: 40.11.1.1.A (page 260), 40.11.1.1.B (page 260), and 43.1.3.1 (page 261).**

NFS Response: Event sequences 40.11.1.1.A and 40.11.1.1.B resulted from a preliminary design evaluation of plastic sections of vent lines. Design changes which replace the plastic lines with steel lines were made, thus rendering these sequences no longer credible. These two sequences will therefore be deleted from the ISA Summary risk assessment tables.

Event sequence 43.1.3.1 describes an upset event which could result in plugging of the scrap recovery dissolver system vent lines. Refer to the previous question 5 response for an explanation of this sequence.

**NRC Question 7: On page 3-15 (NUREG-1520) the SRP states that "The ISA summary need not list as a separate type of accident sequence, every conceivable permutation of an accident. Accidents having characteristics that all fall in the same categories can be grouped as a single type of accident in the ISA Summary, provided that the following conditions are fulfilled:**

1) **The initiating events have the same effect on the system.**
2) **They all consist of failures of the same IROFS or system of IROFS**
3) **They all result in violation of the safety limit on the same parameter**
4) **They all result in the same type and severity categories of consequences**

**The following sequences concerning calciner over pressure and having an initiator frequency of -1 appear to fit the above criteria:**
**4.1.5.2, 5.3.1.1, 5.12.1.1, 6.1.5.1, 6.1.6.1, 6.1.7.1, 6.1.11.1, 6.1.12.1, 6.1.13.1, 6.2.2.1, 6.2.3.1, 6.2.4.1, 6.2.5.5, 6.12.2.1, 7.18.2.2, 7.19.3.4, 7.19.3.7**

**Over 20 discrete permutations of the calciner over-pressure event are identified as separate sequences. If all of these initiators are summed, the actual initiation frequency of over-pressure accident sequence is at least an order of magnitude higher. In consideration of this, please explain how the performance objectives of 10 CFR 70.61 are met.**

<u>NFS Response</u>: Several scenarios that have the potential to over pressurize the calciner rely on the same IROFS (Enhanced Administrative Control: Operator responds to calciner high pressure alarm on CCS, preventing release of calciner off-gases to the room; and Active Engineered Control: Calciner is shut down when high pressure is sensed, preventing release of calciner off-gases to the room). In many scenarios such as 5.1.5.2, the term "shut down the calciner" is used as a shorthand means to describe the following interlocks:

- The hydrogen to the calciner is shut off to reduce gas flow.
- The nitrogen to the calciner is reduced to minimum purge flow rate to reduce gas flow.
- The feed to the centrifuge is shut off. This shuts off the ADU flow to the calciner at the source.

Not included in "shut down the calciner" is turning off the tube rotation or shutting off the heaters since neither of these actions have any effect on the accident scenarios.

Most of these over pressurization scenarios have a conservative initiating frequency index of (-1). It must be understood that these scenarios entail over pressurization of the calciner to a degree and for duration long enough to result in unacceptable consequences. Further, these scenarios have defense-in-depth that make the actual probability for each individual scenario very remote.

The further combination of these scenarios into a single scenario or a hand full of scenarios was considered and rejected. Doing so would require some form of weighted initiating event index that would be very difficult to quantify, especially considering that the individual initiating event indexes were conservative estimates to begin with. In the end, the method that seemed to be most in keeping with the spirit of the regulation was to list the scenarios separately and maintain conservative estimates for the initiating event frequency indexes in each case.

In every case, the resulting accident sequences had a controlled likelihood index of (-4) or greater (normally (-5)) which meets the performance criteria. In addition, failure sequences that resulted from an IROFS failure as the initiating event had a controlled likelihood index of (-4).

The following discussion identifies three basic calciner over pressure scenarios and describes in detail the postulated causes. The purpose of the following sections is to identify defense in depth features that provide margin of safety for each scenario beyond the IROFS specifically listed to meet the performance criteria.

(1) High moisture content in the feed causing over-pressurization

a) Pluggage in dryer off-gas line/filter (Item 5.1.5.2)
b) Residence time in dryer too short (Item 5.3.1.1)
c) Loss of dryer heater (Item 5.12.1.1)
d) Dryer heater setpoint too low (Item 5.12.1.1)
e) Leak of cooling water into calciner off-gas line (Item 7.18.2.2)
f) Packing support plate fails resulting in plugged column (Item 7.19.3.4)

(2) Calciner tube plugged, restricting gas flow, and pressurizing calciner

a) Calciner tube rotation failure (Item 6.1.3.1)
b) Rotary valve on calciner discharge (FV-32D) fails/plugs (Item 6.1.5.1)
c) Rear breech of calciner plugs (Item 6.1.6.1)
d) Powder plugs off-gas line (Item 6.1.7.1)
e) Excessive ADU inlet flow to calciner (Item 6.2.4.1)
f) Failure of off-gas heat trace resulting in wet powder (Item 6.12.2.1)
g) Excessive product from add-back system during normal operations (Item 6.2.3.1)

(3) Calciner over-pressurization

a) Blinding of primary filter, V-32F (Item 6.1.11.1)
b) Blinding of back filter, V-32B (Item 6.1.12.1)
c) Failure of filter rotary valve (Item 6.1.13.1)
d) Bridging at discharge of primary filter (Item 6.1.13.1)
e) High N2 flow through calciner (Item 6.2.2.1)

f) High H2 flow through calciner (Item 6.2.5.5)
g) Off-gas blower (B-38B) fails (Item 7.1.3.5)
h) Leak of cooling water into calciner off-gas line (Item 7.18.2.5)
i) Packing support plate fails resulting in plugged column (Item 7.19.3.7)

**High moisture content in the feed causing over-pressurization.**

**Pluggage in dryer off-gas line/filter (Item 5.1.5.2)**
These scenarios envision added moisture load in calciner off gas since the dryer is not doing its job. In reality, this process of blocking off the dryer off gas flow would take time and would trigger alarms on the dryer internal pressure and for both dryer and calciner off gas filters. Further, due to the open vent path through the calciner off gas filters, a large pressurization would be required before any significant off gas leak could occur that would have any potential for safety related consequences. Other defense-in-depth features include downstream filter differential pressure alarms for indication of off-normal condition and instrumentation to analyze calciner discharge moisture content.

**Residence time in dryer too short (Item 5.3.1.1)**
This scenario envisions high moisture content to the calciner as in 5.1.5.2 above. The difference in this case is that the margin is far greater since the dryer is in operation, although it is not operating optimally, so added moisture is sent to the calciner. It is quite debatable if such an event could result in a significant enough pressurization to result in a leak that had any potential consequences of concern. However, since it could not be ruled out entirely, an initiation frequency index of (-1) was chosen as an extremely conservative estimate. The defense-in-depth of downstream filter differential pressure indicators for indication of off-normal condition and instrumentation to analyze calciner discharge moisture content would provide early detection for operator corrections.

**Loss of dryer heater (Item 5.12.1.1)**
This scenario envisions continued operation with the complete loss of dryer operation. Alarms associated with the loss of dryer heat and off gas would provide ample indication to the operator of a loss of dryer operation. Like scenario 5.1.5.2, the calciner vent path, seals and various process indicators provide an extremely large margin between the initial upset condition in the dryer and any potential for consequences of concern due to a large calciner off gas leak to the room. The defense-in-depth of central control system (CCS) indication of heater malfunction, downstream filter differential pressure indication of off-normal condition and instrumentation to analyze calciner discharge moisture content also contribute to the margin of safety.

**Dryer heater setpoint too low (Item 5.12.1.1)**
As in scenario 5.3.1.1, the dryer remains in operation, although it is not operating optimally. It is quite debatable if such an event could result in a significant enough pressurization to result in a leak that had any potential consequences of concern. However, since it could not be ruled out entirely, an initiation frequency index of (-1) was chosen as an extremely conservative estimate. The defense-in-depth of downstream filter differential pressure alarms for indication of off-

normal condition and instrumentation to analyze calciner discharge moisture content provide early detection that provides time for operator corrections.

**Leak of cooling water into calciner off-gas line (Item 7.18.2.2)**
The leak of cooling water is postulated to be sufficient to back up into the off gas line and restrict off gas flow. Under normal circumstances, the condenser separator gravity drains to the condensate tank. A very large leak rate would be required before the volume would exceed the drain capacity of the separator. Proper selection and maintenance of components and materials would minimize the potential for leaks and ensure that any leak that did occur would not propagate into a large leak. For the small kind of leak that heat exchangers typically see in industrial operation, the potential for intermediate or high consequences is considered very remote, so an initiating event frequency index of (-1) is considered to be an extremely conservative estimate.

**Packing support plate fails resulting in plugged column (Item 7.19.3.4)**
Failure of the support plate is assumed to result in a cascading failure that results in the plugging off of the scrubber drain line and the back up of liquid into the off gas line, resulting in restrictive off gas flow. Under normal circumstances, proper selection and maintenance of materials and components prevents the failure of the packing support, and even if the plate failed, it is possible to still drain the column, so the only result would be degradation in scrubber performance. As a result, an initiating event frequency index of (-1) is considered to be a very conservative estimate for this scenario. Additional defense-in-depth is provided by differential pressure indication of off-normal conditions.

**Calciner tube plugged, restricting gas flow, and pressurizing calciner**

**Calciner tube rotation failure (Item 6.1.3.1)**
The initiation frequency index of (0) was chosen as an extremely conservative estimate for potential failure of the rotating equipment alone which would lead to plugging severe enough to cause the consequences of concern. Defense in depth features that provide added margin include continuously monitoring of tube rotation and numerous process indications related to the loss of off-gas and reaction gas flow due to plugging. These alarms would also alert the operator to the upset condition and help to limit the potential for a release of gases to the room with the potential for consequences of concern.

**Rotary valve on calciner discharge (FV-32D) fails/plugs (Item 6.1.5.1)**
Plugging in this scenario would have the potential to restrict the flow of reaction gases into the calciner tube and result in an increased pressure on the powder discharge end. It is a very slow developing scenario, giving the operators plenty of time to take corrective action. In the case of rotary valve failure, a device failure alarm is available to the operator. In addition, flow deviation alarms for the nitrogen and hydrogen flow to the calciner would also alert the operator to the upset condition.

Rear breech of calciner plugs (Item 6.1.6.1)

This is also a slow developing scenario. Further, the powder composition and flow rates do not lend themselves to plugging the relatively large rear breech of the calciner. As in scenario 6.1.5.1, flow deviation alarms for the nitrogen and hydrogen flow to the calciner would also alert the operator to the upset condition.

Powder plugs off-gas line (Item 6.1.7.1)

A plug due to unusual powder build-up within the system, from filters or piping, would not occur instantaneously. Filter dP indications and trends provide indication of off gas flow to give the operator indication of an off gas problem. Blockage in the off gas would also result in restricted flow of calciner reaction gases. Deviation alarms would alert the operator to potential problems. These defense-in-depth features provide enhanced margin of safety.

Excessive ADU inlet flow to calciner (Item 6.2.4.1)

This scenario postulates an extremely high material flow rate through the dryer. This situation would be analogous to the low residence time scenario listed in scenario 5.3.1.1. Since the dryer is in operation, although it is not operating optimally, added moisture is sent to the calciner. It is debatable if such an event could result in a significant enough pressurization to result in a leak that had any potential consequences of concern. However, since it could not be ruled out entirely, an initiation frequency index of (-1) was chosen as an extremely conservative estimate. The defense-in-depth of downstream filter differential pressure indicators for indication of off-normal condition and instrumentation to analyze calciner discharge moisture content would provide early detection for operator corrections.

Failure of off-gas heat trace resulting in wet powder (Item 6.12.2.1)

This is a variation of 6.1.7.1, and in addition to defense in depth listed there, low temperature alarms provide further warning of impending problems.

Excessive product from add-back system during normal operations (Item 6.2.3.1)

Even if the add back were to be set too high for process conditions, the most likely result would be that the feed hopper would fill and the rotary valve from the add back would simply rotate without dropping further powder. It is very unlikely that this would have any significant effect on the calciner operation. As a result, the initiating event frequency index of (-1) is considered very conservative for this accident sequence.

**Calciner over-pressurization**

Blinding of primary filter, V-32F (Item 6.1.11.1)

Blinding of the primary filters would not occur instantaneously. Filter dP indications, trends, and alarms provide indication of off gas flow to give the operator indication of an off gas problem. Blockage in the off gas would also result in restricted flow of calciner reaction gases. If severe enough blockage occurred, deviation alarms would alert the operator to potential problems.

<u>Blinding of back filter, V-32B (Item 6.1.12.1)</u>
It is very unlikely that the backup filter would blind if the primary did not. Thus, the -1 initiating event index is very conservative. As above, the blinding of the filters would not occur instantaneously. Blockage in the off gas would also result in restricted flow of calciner reaction gases. If severe enough blockage occurred, deviation alarms would alert the operator to potential problems.

<u>Failure of filter rotary valve/ Bridging at discharge of primary filter (Item 6.1.13.1)</u>
This is the same as 6.1.11.1 above.

<u>High N2 flow through calciner (Item 6.2.2.1)/ High H2 flow through calciner (Item 6.2.5.5)</u>
The calciner has a normally open vent path and is operated at a vacuum (downstream blowers maintain a negative pressure within the calciner pulling off-gases from the calciner). For this reason, it is debatable whether deviations from setpoint would result in anything but a minor process upset. As a result, the initiating event frequency index of (-1) is considered to be very conservative for this accident sequence. Even if large variations did have an effect on calciner pressure, flow deviation alarms would alert the operator so that corrective action could be taken. Filter pressure drop alarms would provide further defense in depth.

<u>Off-gas blower (B-38B) fails (Item 7.1.3.5)</u>
Failure of the off gas blower would not block off the vent path from the calciner. The open vent path would prevent excessive build up in pressure, so it is unlikely that the calciner would pressurize to the degree necessary to cause consequences of concern. Blower failure alarm will sound in the CCS and would alert the operator and allow corrective action.

<u>Leak of cooling water into calciner off-gas line (Item 7.18.2.5)</u>
This is the same as 7.18.2.2.

<u>Packing support plate fails resulting in plugged column (Item 7.19.3.7)</u>
This is the same as 7.19.3.4.

**NRC Question 8: EAL-11 is identified as an administrative control on page 334. It should be listed as an enhanced administrative control as it is identified in sequence 25.1.1.1.**

<u>NFS Response</u>: Page 334 will be corrected to identify EAL-11 as an enhanced administrative control.

**NRC Question 9: Please identify by designator the IROFS described as: "Acid POG system differential pressure switch interlock will maintain dissolver feed isolation valves in closed position unless acid POG system is in operation" listed in sequence 43.18.1.1 on page 263.**

NFS Response: ODS-16

**NRC Question10: There was no list of commitments to a method for maintaining a current and accurate set of process information, requirements for ISA team training, nor commitments to ISA methods as described in Section 3.3.1 of the SRP in the ISA summary. Do these commitments exist in the ISA?**

NFS Response: Section 5 of the ISA Summary describes "*ISA Team and ISA Method*". Specific ISA program commitments are detailed in internal procedure NFS-GH-55 *Integrated Safety Analysis* (as reviewed during the vertical slice review of 2/9-12/04).

**NRC Question 11: Even with the licensee's proposed definitions of unlikely and highly unlikely, the licensee's flood analysis (only analyzing the 100 year flood) is insufficient to adequately evaluate potential flooding events that may result in radiological, chemical, or criticality consequences.**

NFS Response: The design base threshold for events associated with floods described herein is fully consistent with the methodology previously approved by the NRC for the Uranyl Nitrate Building and BLEU Preparation Facility, as noted in Amendments 39 and 47, respectively. To reflect this regulatory decision, Section 1.4 – Hydrology, of the ISA Summary will be replaced with the following text:

> *As shown in **Figure 1-5**, only the northern portion of the NFS site is within the 100-year floodplain of Martin Creek. The construction of I-26 (formerly known as U.S. 23/I-181) and improvements to the CSXT railroad have modified the adjacent topography to further protect the site in the event of a 100-year flood. Martin Creek runs along the northern boundary of the NFS property and through a culvert under the CSXT rail yard. The Nolichucky River is located west of the NFS site, and is separated from the NFS property by I-26 and the CSXT rail yard by distance (approximately 500 feet) and elevation (I-26 and CSXT are located at an elevation several feet higher than the NFS site and the Nolichucky River, effectively creating a barrier between the two).*
>
> *The Town of Erwin participates in the National Flood Insurance Program (NFIP) created by Congress in 1968. Communities that participate in NFIP adopt and enforce flood plain management ordinances that provide flood loss reduction building standards*

*for new and existing development. The lowest floor elevation for buildings that are located in the 100-year floodplain must be at least one foot above the Base Flood Elevation.*

*The OCB is located approximately 2,200 feet from Martin Creek and approximately 1,000 feet from the closest point on the 100-year floodplain boundary line for Martin Creek. The OCB or EPB are not located in the 100-year floodplain, and the lowest floor elevation is fifteen (15) feet above the Base Flood Elevation, thus a large margin of safety exists.*

Section 4.2.6 – Flood, of the ISA Summary will be replaced with the following text:

*The OCB or EPB are not located in the 100-year floodplain, and the lowest floor elevation is fifteen (15) feet above the Base Flood Elevation, thus a large margin of safety exists. As such, there is no physically credible accident scenario that could result in a flood of the facility.*

*Even if a threat of significant flooding existed, sufficient time would be available to prepare for such an event since river/creek flooding is typically not an event that happens instantaneously. The process would be shutdown, the facilities secured, and an evacuation of the site and surrounding area would occur if necessary.*