I. Minimal

- One sedative drug therapy with or without nitrous oxide for the purpose of achieving minimal sedation.

- **Determining when a permit is necessary** - No permit is required if the patient is prescribed the Manufacturer’s Maximum Recommended dose (MRD) of a sedative for anxiolysis used the night prior to the treatment or to be taken on the day of treatment. However, if additional sedation is prescribed or dispensed for use or administration on the day of treatment, including nitrous oxide/oxygen or any oral or intravenous sedation, or combination thereof, the proper anesthesia permit is required.

- **Supplemental dosing** - during minimal sedation, supplemental dosing is a single additional dose of an initial drug. The supplemental dose should not exceed one-half of the initial dose (i.e. packet insert) and should not be administered until the dentist has determined the clinical half-life of the initial dosing has passed. The total aggregate dose must not exceed 1.5x the MRD for sedation on the day of treatment.

- Practitioners performing minimal sedation in their office must maintain the following equipment:
  - Pulse Oximeter;
  - A blood pressure cuff or appropriate size and stethoscope, or equivalent blood pressure monitoring devices;
  - Board or rigid surface for cardiopulmonary resuscitation (CPR);
  - An appropriate size bag-valve-mask apparatus or equivalent with an oxygen hook-up;
  - Oral and nasopharyngeal airways;
  - An external defibrillator- manual or automatic (w/ battery back-up)
  - Gas delivery systems check and calibrated periodically as required by manufacturer; date last check visibly displayed on machine;
  - Equipment capable of delivering positive pressure ventilation;
  - NIOSH approved environmental monitors for nitrous oxide
  - CO2 Fire extinguishers;
  - Gas delivery machines must have the following:
• An oxygen fail-safe system
• Safety keyed hose attachments
• Capability to administer 100% oxygen in all examination/treatment rooms
• Storage & signage for nitrous oxide oxygen tanks in compliance with safety codes
• Adequate waste gas scavenging system
• Autoclavable or disposable hoods

• Any practitioner administering minimal sedation or nitrous oxide in their office shall maintain the following emergency medications in their office:
  o Acetylsalicylic acid (rapidly absorbable form)
  o Ammonia inhalants
  o Antihistamine
  o Antihypoglycemic agent
  o Bronchodilator
  o Epinephrine pre-loaded syringes (pediatric and adult)
  o Oxygen
  o Reversal agents for Narcotics
  o Reversal agents for Benzodiazepines
  o Vasopressor
  o Corticosteroid (Dexamathasone)
  o Nitroglycerin

• Individual and facility permits for nitrous oxide and minimal sedation would be granted by the completion of a self-reporting form executed by the applicant. There would be no physical inspection of the applicant’s facility or assessment of the applicant’s competency.

• Facility permits must be issued in the name of the facility owner.

• **Education**
  o Dental School
  o BLS with AED training
II. **Moderate**

- A drug induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by a light tactile stimulation. No interventions are required to maintain a patent airway, and spontaneous ventilation is adequate. Cardiovascular function is usually maintained. Administration of moderate sedation includes parenteral, enteral sedation with or without nitrous-oxide.

- **Dosing** - Multi-drug therapy has a high propensity to lead to a deeper than intended level of sedation which is outside the scope of this permit. Thus the use of single agent medication within the scope of package insert dosage amounts is strongly recommended, to maintain a margin of safety and prevent unintended deep sedation. Be advised that the maximum safe dosage amount depicted on the package insert does not take into consideration the added effects of using more than one sedative agent at a time.

- The use of Propofol, Brevital, Sodiumthiopental and Ketamine as well as any volatile inhalation anesthetic is strictly prohibited with a moderate sedation permit or below.

- **Supplemental dosing** - when the MRD of a drug is exceeded or a second sedative agent is utilized the guidelines for moderate sedation shall apply.

- In accord with the definition of moderation sedation, the drugs and/or techniques used should carry a margin of safety wide enough to prevent unintended deep sedation.

- If a patient enters a deeper level of sedation than the dentist is qualified to provide, the dentist must stop the dental procedure until the patient returns to the intended level of sedation.

- **Qualifying Patient** – Administering moderate sedation to any patient above an ASA II plus one (1) co-morbidity is strictly prohibited with a moderate sedation permit or below.

- **Duration** - No procedure shall exceed ninety (90) minutes in treatment time where the patient is under moderate sedation.
• **Education- Individual Permit**
  - Successful completion of comprehensive training program in moderate sedation that satisfies the requirements described in the Moderate Sedation
  - 100 continuous didactic lecture hours from a CODA or CERP accredited program approved by the Board; perform a minimum of 20 IV sedations on live patients as primary operator, under supervision, per participant;
  - Submit a notarized letter from the Department Chair of the graduating program certifying that the applicant has met the minimal competency standards necessary to perform the level of sedation being sought;
  - Training must be completed within last 5 years prior to permit application;
  - ACLS (plus PALS if doing kids);
  - Must have written referral privileges to hospital for patients OR
  - Fellowship or Membership by American Association of Oral and Maxillofacial Surgeons, or
  - Board Certification by the American Society of Anesthesiology
  - Permits are renewable every 2 years

• **Inspections**- Each applicant for an individual moderate permit must be assessed and evaluated at an on-site inspection and evaluation for clinical competency in addition to meeting the educational requirements for a permit. The on-site inspection will include conduction of emergency simulations with the involvement of the applicant’s office staff.
  - The Board retains the right to re-inspect any anesthesia permit holder prior to renewal.

***Reasoning to the Board (not necessarily for regulations)***

While the RIAOMS recognize that simulation labs are a useful adjunct and skill developer for training purposes in a controlled environment to assess competency, it can lack one fundamental thing. That one thing is the opportunity to assess an applicant in their own facility and see them interact with their own staff. A simulation lab simply cannot replace an on-site office evaluation using the same staff and equipment which would actually be used in a real emergency.
Part of what holds dental anesthesia apart from other medical specialties and also what draws so much attention (and at times criticism) from the public regarding patient safety is the unique setting in which the anesthesia is being administered (i.e. the dental office.) In the absence of board certified anesthesiologists, fully stocked operating rooms having every kind of patient monitors at your disposable, and being surrounded by medical personnel of various educational levels, as one would have in a hospital setting, anesthesia in a dental office is a trade and specialty that is different than any other requiring a practitioner to be well trained, experienced and educated on all facets of anesthesia administration, including the risks and complications associated with the same. The provider must be prepared, as does their staff, to handle an airway emergency that occurs in a dental office, regardless of how remote or rurally located, because during that procedure that patient’s safety is in the hands of the dentist. For those reasons, we therefore propose that an on-site office evaluation in the facility to be used to deliver anesthesia must be mandated in order to assess the applicant’s competency during simulated emergencies and inspect and evaluate the facility itself prior to granting a moderate permit. This evaluation should include an interaction with the applicant’s staff. Every oral surgeon administering anesthesia is held to the same evaluation and inspection process every 5 years in accordance with the Parameters of Care of their professional association.

- **Insurance** - The applicant is required to maintain appropriate professional liability insurance in connection with administering anesthesia individually and/or in their facility.

- **Facility Permit** – An applicant must have an on-site inspection to obtain a moderate sedation facility permit.
  - The permit shall be in the name of the facility owner
  - The facility shall be re-inspected every 5 years
  - All anesthesia equipment and medication must remain in the facility shall not be transferred from one location to another.
  - The facility must carry adequate liability insurance covering the administration of anesthesia at said location.

  - **Emergency Drugs the facility must maintain:**
    - Oxygen - continuous use during general anesthesia and/or parenteral sedation
    - Epinephrine
- 1:10,000
- 1:1,000
- Atropine
- Lidocaine
- Adenosine
- Verapamil
- Antihistamine (e.g. Diphenhydramine)
- Anticonvulsant
- Coronary vasodilator (e.g. Nitroglycerine)
- IV Antihypoglycemic agent (e.g. Glucose) Dextrose 50% or Glucagon
- Corticosteroid (e.g. Dexamethasone)
- Aerosol Nebulizer (Albuterol B2 agonist) with connector to airway circuitry
- Vasopressor (e.g. Phenylephrine, Dopamine, Norepinephrine, Ephedrine)
- Morphine
- Narcotic antagonist (Narcan)
- Antagonist if Benzodiazepines are used (Romazicon)
- Anti-hypertensive medications for example Ca channel blocker, beta blocker, sodium nitroprusside
- Dantrolene Sodium (required if using volatile inhalation anesthetic agents other than nitrous oxide, otherwise, strongly recommended if Succinylcholine used)
- Antiemetic or Zofran
- Aspirin (ASA)
- Lasix
- Magnesium Sulfate
- Non-depolarizing neuromuscular blocker with rapid onset (e.g. Rocuronium)
- Succinylcholine
- Sodium Bicarbonate
- Amiodarone

Equipment and Records the facility must maintain:
- Medication Refrigerator with thermometer and alarm;
- Daily Temperature Log on Refrigerator;
- Controlled Substance and Administration Logs;
- Appropriate time-oriented anesthetic record must be maintained, including the names of all drugs, dosages and their administration times, including local anesthetics and monitored physiological parameters (more adequately described in ADA guidelines and/or AAOMS Parameters of Care);
- Pre-operative verbal or written instructions must be given to the patient, parent;
- Post-operative verbal and written discharge instructions must be given to the patient, parent;
- Written emergency protocol;
- Gas delivery system capable of positive pressure ventilation;
- CO2 fire extinguishers;
- Equipment capable of administering 100% oxygen in all rooms (operative, recovery, examination, and reception);
- Portable bag-mask ventilator (ambu-bag);
- Full facemask;
  - Adult; and
  - Pediatric;
- Nasal hood or cannula;
- Oral airways (oropharyngeal airways);
  - Adult; and
  - Pediatric;
- Nasopharyngeal airways;
  - Adult; and
  - Pediatric
- Endotracheal tubes with appropriate connectors and syringe for inflation;
- Laryngoscope (straight or curved blade) w/ pediatric sizes
- Combi tube or LMA, w/ pediatric sizes;
- Portable suctioning equipment capable of use during electrical power failure;
- Equipment capable of suctioning the throat in all rooms;
- Nasopharyngeal suction catheter;
- Yankauer or similar suction;
- McGill forceps;
- Tongue grasping forceps;
- Equipment for emergency crico-thyrotomy or tracheotomy and the appropriate connectors for administering 100% oxygen;
• Blood pressure cuffs;
  • Adult; and
  • Pediatric;
• ECG;
• Defibrillator;
• Board or rigid surface for cardiopulmonary resuscitation (CPR);
• Back-up light source capable of use during electrical power failure;
• Intravenous solutions and equipment for administration;
  • 250cc bags & 1000cc bags of sterile saline – 0.9% NaCl; and
  • Sterile water for mixing or dilution of drugs; and
• Appropriate intravenous needles, tubing and drips;
• Adequate recovery space where oxygen, suction and pulse oximeter must be immediately available;
• Continuous pulse oximeter;
• A blood pressure cuff or appropriate size and stethoscope, or equivalent blood pressure monitoring devices;
• End-tidal carbon dioxide monitor;
• Electrocardiograph (where clinically indicated)
• Intraosseous device or similar (if treating pediatric patients)

III. Deep Sedation/General Anesthesia

• Education-
  • Must have Fellowship or Membership by American Association of Oral and Maxillofacial Surgeons, or
  • Board Certification by the American Society of Anesthesiology.

• Inspections- Each applicant for an individual and a facility Deep Sedation/General Anesthesia permit must be assessed and evaluated at an on-site inspection and evaluation for clinical competency in addition to meeting the educational requirements for a permit. The on-site inspection will include conduction of emergency simulations with the involvement of the applicant’s office staff.
  • The Board retains the right to re-inspect any anesthesia permit holder prior to renewal.
• **Insurance** - The applicant is required to maintain appropriate professional liability insurance in connection with administering anesthesia individually and/or in their facility.

• **Facility Permit** – An applicant must have an on-site inspection to obtain a moderate sedation facility permit.
  - The permit shall be in the name of the facility owner.
  - The facility shall be re-inspected every 5 years.
  - All anesthesia equipment and medication must remain in the facility shall not be transferred from one location to another.
  - The facility must carry adequate liability insurance covering the administration of anesthesia at said location.

• **Emergency Drugs the facility must maintain:**
  - Oxygen - continuous use during general anesthesia and/or parenteral sedation
  - Epinephrine
    - 1:10,000
    - 1:1,000
  - Atropine
  - Lidocaine
  - Adenosine
  - Verapamil
  - Antihistamine (e.g. Diphenhydramine)
  - Anticonvulsant
  - Coronary vasodilator (e.g. Nitroglycerine)
  - IV Antihypoglycemic agent (e.g. Glucose) Dextrose 50% or Glucagon
  - Corticosteroid (e.g. Dexamathasone)
  - Aerosol Nebulizer (Albuterol B2 agonist) with connector to airway circuitry
  - Vasopressor (e.g. Phenylephrine, Dopamine, Norepinephrine, Ephedrine)
  - Morphine
  - Narcotic antagonist (Narcan)
  - Antagonist if Benzodiazepines are used (Romazicon)
  - Anti-hypertensive medications for example Ca channel blocker, beta blocker, sodium nitroprusside
o Dantrolene Sodium (required if using volatile inhalation
anesthetic agents other than nitrous oxide, otherwise, strongly
recommended if Succinylcholine used)
o Antiemetic or Zofran
o Aspirin (ASA)
o Lasix
o Magnesium Sulfate
o Non-depolarizing neuromuscular blocker with rapid onset (e.g.
  Rocuronium)
o Succinylcholine
o Sodium Bicarbonate
o Amiodarone

• Equipment and Records the facility must maintain:
o Medication Refrigerator with thermometer and alarm;
o Daily Temperature Log on Refrigerator;
o Controlled Substance and Administration Logs;
o Appropriate time-oriented anesthetic record must be maintained,
  including the names of all drugs, dosages and their administration
times, including local anesthetics and monitored physiological
  parameters (more adequately described in ADA guidelines and/or
  AAOMS Parameters of Care);
o Pre-operative verbal or written instructions must be given to the
  patient, parent;
o Post-operative verbal and written discharge instructions must be
  given to the patient, parent;
o Written emergency protocol;
o Gas delivery system capable of positive pressure ventilation;
o CO2 fire extinguishers;
o Equipment capable of administering 100% oxygen in all rooms
  (operatory, recovery, examination, and reception);
o Portable bag-mask ventilator (ambu-bag);
o Full facemask;
  ▪ Adult; and
  ▪ Pediatric;
o Nasal hood or cannula;
o Oral airways (oropharyngeal airways);
  ▪ Adult; and
  ▪ Pediatric;
o Nasopharyngeal airways;
- Adult; and
  - Pediatric
  - Endotracheal tubes with appropriate connectors and syringe for inflation;
  - Laryngoscope (straight or curved blade) w/ pediatric sizes;
  - Combi tube or LMA, w/ pediatric sizes;
  - Portable suctioning equipment capable of use during electrical power failure;
  - Equipment capable of suctioning the throat in all rooms;
  - Nasopharyngeal suction catheter;
  - Yankauer or similar suction;
  - McGill forceps;
  - Tongue grasping forceps;
  - Equipment for emergency crico-thyrotomy or tracheotomy and the appropriate connectors for administering 100% oxygen;
  - Blood pressure cuffs;
    - Adult; and
    - Pediatric;
  - ECG;
  - Defibrillator;
  - Board or rigid surface for cardiopulmonary resuscitation (CPR);
  - Back-up light source capable of use during electrical power failure;
  - Intravenous solutions and equipment for administration;
    - 250cc bags & 1000cc bags of sterile saline – 0.9% NaCl;
    - Sterile water for mixing or dilution of drugs; and
  - Appropriate intravenous needles, tubing and drips;
  - Adequate recovery space where oxygen, suction and pulse oximeter must be immediately available;
  - Continuous pulse oximeter;
  - A blood pressure cuff or appropriate size and stethoscope, or equivalent blood pressure monitoring devices;
  - End-tidal carbon dioxide monitor;
  - Electrocardiograph (where clinically indicated)
  - Intraosseous device or similar (if treating pediatric patients)
IV. Pediatric Patients

- Pediatric patients shall be any child under the age of 12yrs old
- PALS shall be required
- All emergency equipment must be available in pediatric sizes.